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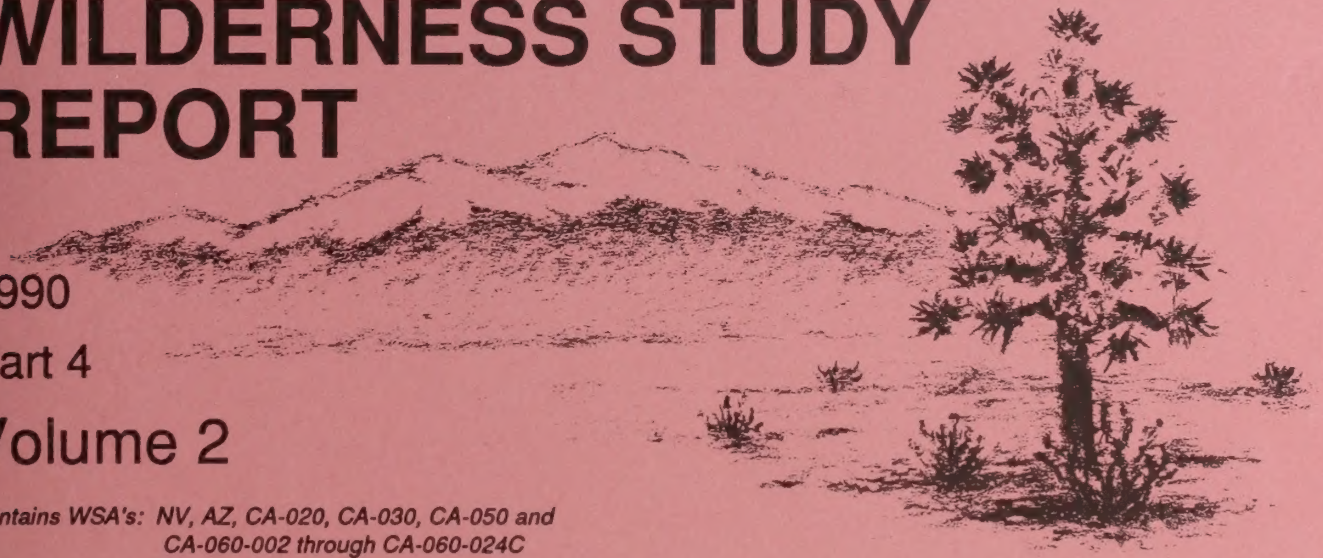
CALIFORNIA STATEWIDE WILDERNESS STUDY REPORT



1990

Part 4

Volume 2

Contains WSA's: NV, AZ, CA-020, CA-030, CA-050 and
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Supplemental information to these reports includes Environmental Documents, Mineral Survey Reports, and maps. To review these supplemental data, or to obtain additional information, please contact:

Bureau of Land Management
Branch of Wilderness Resources
Room 3360
Main Interior Building
18th and C Streets
Washington, D.C. 20002

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Bureau of Land Management
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Carson-Iceberg

NV-030-532

CARSON-ICEBERG WILDERNESS STUDY AREA (WSA)

(NV-030-532)

1. THE STUDY AREA --- 550 acres

The Carson-Iceberg WSA lies in Alpine County near the middle of the eastern edge of California, approximately 30 miles southeast of South Lake Tahoe and 90 miles east of Sacramento. The WSA includes 550 acres of Bureau of Land Management (BLM) land and no State land or private inholdings (see Map 1 and Table 1).

The WSA is bounded on the west and south sides by the Toiyabe National Forest/Carson Iceberg Wilderness, on the north and southeast sides by private lands, and on the northeast by an unpaved road on BLM land.

The WSA comprises a mixed coniferous forest on both sides of the East Fork of the Carson River in the Eastern Sierra Nevada. The river flows northerly through a rugged, winding canyon for one-and-a-half miles in the WSA. The meadows of Silver King Valley flank the WSA to the east at an elevation of 6,400 feet, while the 7,000-foot western side of the WSA is surrounded by higher elevation coniferous forest in the 154,000-acre U.S. Forest Service (USFS) wilderness. Landscape character inside the WSA is very similar to that in the adjacent wilderness.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). Suitability recommendations were analyzed in the Draft and Final Environment Impact Statements (EIS) for the California Section 202 Wilderness Study Areas. A summary of the area's wilderness values was included in the Final EIS. Two different suitability recommendations were analyzed in the EIS: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE --- 550 acres recommended for wilderness
0 BLM acres recommended for non-wilderness

All wilderness is the recommendation for this WSA. The all-wilderness alternative is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long term.

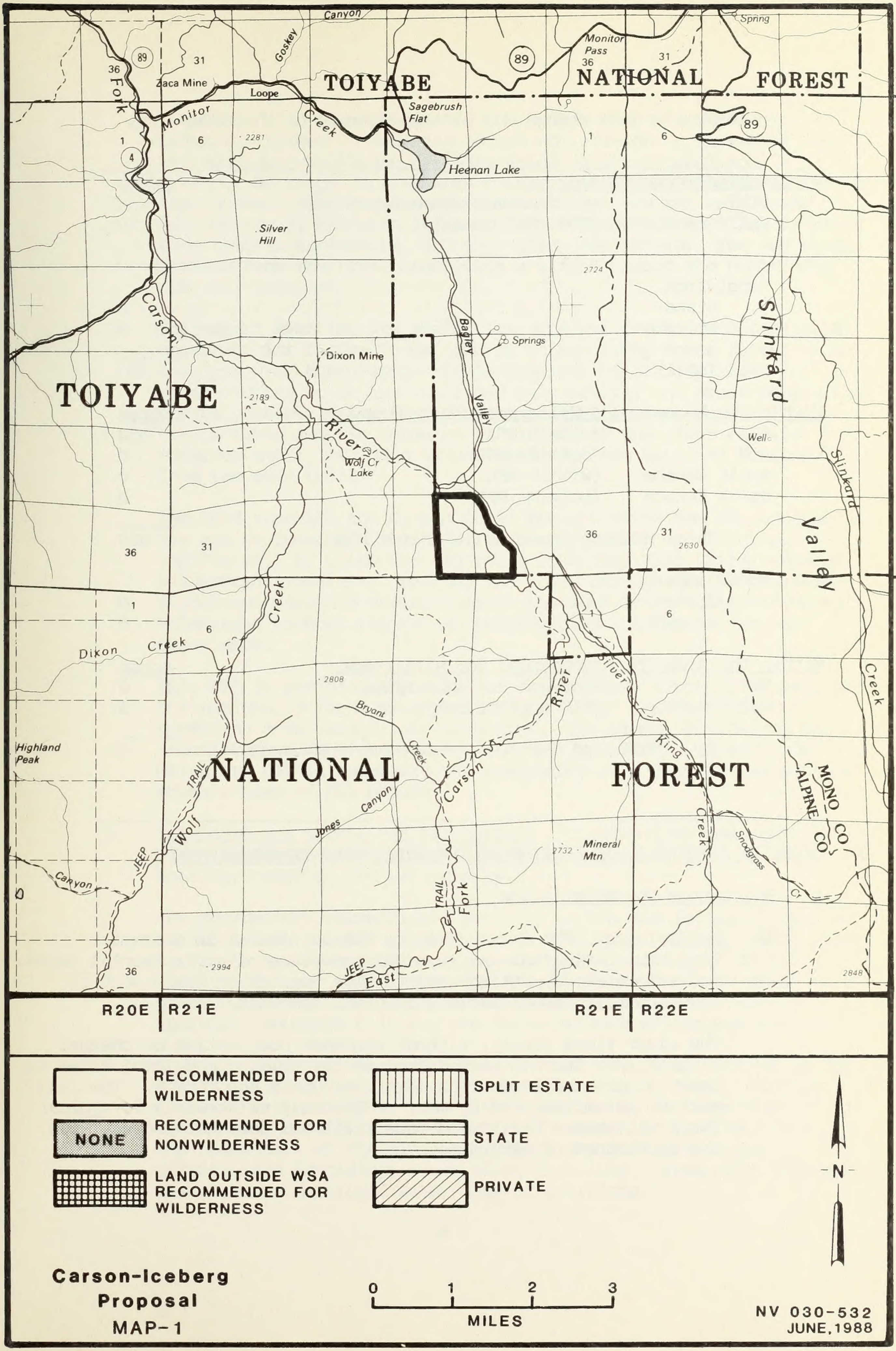
The rationale for the all-wilderness recommendation is that the outstanding wilderness characteristics in the entire WSA are similar to those in the surrounding 154,000-acre Carson-Iceberg Wilderness. Currently the main land use in the WSA is primitive recreation associated with the existing wilderness. All other land uses in the WSA are compatible with wilderness.

The free-flowing East Fork of the Carson River flows through one and a half miles of winding, rugged, forested canyon. The Toiyabe National Forest has determined the clear, clean stream to be eligible for wild river designation under the Wild and Scenic Rivers Act.

Designation of the WSA would increase the manageability of the existing Carson-Iceberg Wilderness. The USFS constructed the Carson River Trail through the middle of the WSA, roughly parallel to the river, to provide a major access route to the wilderness backcountry. This trail provides the primary public access to the WSA two miles in from the trailhead at Wolf Creek Meadows; the road in Silver King Valley is closed to the general public at Highway 89 five miles north of the WSA. Views of the river and the wilderness high-country are available along the trail.

The proposed wilderness is vegetated with mixed coniferous forest which varies greatly in composition and appearance according to site characteristics. A narrow riparian zone, including meadows, flanks the river. Fish and wildlife abound.

The imprint of man's work is substantially unnoticeable throughout the unit, even along the modest man-made trail. Timber, ridges, and steep canyons isolate the visitor from outside sights and sounds and from other wilderness users. Sites suitable for camping, fishing, and exploring are numerous off the trail even within the small acreage of the WSA.



Carson-Iceberg Proposal

MAP-1

NV 030-532
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	550
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		550
Within the Recommended Wilderness Study Boundary		Acres
BLM	(within WSA)	550
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		550
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	0
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		0

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Carson-Iceberg WSA is natural in character; long-term biological and physical processes of environmental cause and effect are operating intact. The imprint of man's work is substantially unnoticeable throughout the unit.

   The river flows freely, without man-made obstruction or channel alteration. Terrain varies from gently rolling and level sites to steep slopes and large rock outcroppings in the canyon. The land surface is undisturbed by man. USFS trail maintenance is typical for a wilderness hiking and pack trail and does not detract from the appearance of naturalness.

Vegetation and wildlife in the WSA appear very diverse and natural. Slight to moderate forage utilization by livestock has not degraded vegetation, and the trend of range condition is upward. No range improvements exist, and none are needed now or in the future. Scattered decaying tree stumps are the only ready indications of historic logging. Second growth forest has returned to a natural appearance, and many trees are mature. The few stumps visible from the trail constitute a slight impact and contribute cultural interest.

2. Solitude: Even for its small size, the WSA provides considerable opportunities for solitude, due to screening by dense forest cover and irregular topography. It is possible to hike or ride cross-country or on the trail and only briefly see other people who may be present in the WSA. Meadows along the east fork of the Carson River and the forested ridge east of the river contain numerous small, secluded sites where visitors can find solitude from the main trail.

   The USFS rerouted the Carson River Trail through the WSA because the new route offers solitude from developments and motorized vehicle use, to which the old route in Silver King Valley exposed wilderness travelers. Routing the trail through the WSA enables wilderness users to travel through the much larger Carson-Iceberg Wilderness without the former interruptions of the wilderness experience.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and unconfined recreation: Opportunities for primitive dispersed recreation include hiking, horseback riding, fishing, hunting, camping, and photography.

   The predominant recreational activity in the WSA is travel by foot and horseback between the Wolf Creek Trailhead and many other sites in the Carson-Iceberg Wilderness at the estimated rate of 400 visitor-days per year. Thus the WSA provides access to still greater opportunities for primitive, unconfined recreation, including mountain climbing and long-distance wilderness travel.

4. Special features: The most distinct and noteworthy feature in the WSA is the east fork of the Carson River flowing freely through timbered canyon slopes. The river contributes in large measure to the scenic, natural, and recreational values in the area. While the headwaters of the river are within the USFS wilderness, private land inholdings occur along the river. Presently, however, there are no developed water uses or conflicts.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 550 acres of the Sierran Forest/Mixed Conifer Forest ecosystem. While wilderness designation of this WSA would not add an entirely new ecosystem to the NWPS, it would further strengthen the protection which wilderness designation already provides to ecosystems in the Carson-Iceberg Wilderness. The WSA is typical of the Sierran Forest Province mixed conifer forest and adjacent to the higher elevation lodgepole pine-subalpine forest.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
		NATIONWIDE		
Sierran Forest/ Mixed Conifer Forest	26	1,772,907	13	148,363
		CALIFORNIA		
Sierran Forest/ Mixed Conifer Forest	26	1,772,907	1	5,382

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of 10 major population centers. Table 3 summarizes the number of acreage of designated areas and other BLM study areas within a five hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Fresno	35	4,048,852	28	460,790
Merced	33	3,957,550	25	348,753
Modesto	36	4,126,963	81	1,722,326
Sacramento	46	5,001,817	87	2,479,541
San Francisco-Oakland	39	4,473,002	39	565,614
San Jose	27	3,765,512	29	352,748
Santa Rosa-Petaluma	10	888,579	12	134,167
Stockton	35	4,061,833	46	601,496
Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809

3. Balancing the geographic distribution of wilderness areas: There are no other BLM WSAs within 50 air miles recommended for wilderness designation. The Granite Chief (Tahoe National Forest), Desolation (Eldorado NF), and Mokelumne (Eldorado NF) Wilderness Areas are located approximately 50, 30, and 15 miles respectively northwest of the WSA. The Carson-Iceberg Wilderness (Toiyabe NF) is adjacent to the south, east, and west of the WSA. The Emigrant (Stanislaus NF), Hoover (Toiyabe NF), and Yosemite (Yosemite National Park) Wilderness Areas are located about 20, 25, and 35 miles, respectively, toward the south of the WSA.

C. Manageability

The area is manageable as wilderness. The means of managing it as wilderness are already in place by virtue of the current USFS management program for the Carson Iceberg Wilderness, and designation would increase the manageability of the existing wilderness. The USFS already maintains the trail it made through the WSA and patrols the wilderness along the trail on both sides of the WSA. This trail provides the primary public access to the WSA via a two-mile hike or ride through existing wilderness. The road to Silver King Valley is closed to the general public at Highway 89 five miles north of the WSA. No conflicting uses occur within the area.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at the time of the preliminary suitability recommendation: The energy and minerals potential of the Carson-Iceberg WSA is addressed in the Final Environmental Impact Statement for the California Section 202 Wilderness Study Areas. The EIS indicates that Tertiary volcanics underlie approximately 90 percent of the WSA. The geology does not indicate the presence of oil and gas or geothermal resources, and the potential for economic deposits of leasable minerals is low. No unique salable minerals are present. While the andesitic breccias, tuffs, and flows would generally be suitable for native borrow or fill applications, there is no anticipated market near the area and thus no value for salable mineral materials.

   There were no mining claims in the WSA as of January, 1988. Some mining claims and mineral discoveries exist just a few miles outside the WSA in the same rock type. There are no known economic deposits of locatable minerals within the WSA, however, and the potential appears to be low to moderate.

2. Summary of significant new mineral resource data collected since the suitability recommendation, which should be considered in the final recommendation: Some mining claims and mineral discoveries exist just a few miles outside the WSA in the same rock type. There are no known economic deposits of locatable minerals within the WSA. In 1988, the U.S. Geological Survey and the U.S. Bureau of Mines published Open-File Report 88-273 on the mineral resources in the study area, based on 1987 mineral surveys. The report concludes, "No resources were identified in the study area, but the results of these surveys indicate that the area has low resource potential for gold in placer deposits and for silver in epithermal type deposits." According to BLM records, there were no unpatented mining claims, mineral sales or leases in the WSA as of January, 1988. Because of low potential for mineral resources, no mineral potential map was prepared for this document.

E. Impacts on Resources

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or non-designation of the entire area as wilderness. (For a full explanation of this summary, refer to the Final Environmental Impact Statement for the California Section 202 Wilderness Study Areas.)

Table 4 - Comparative Summary of Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (All-WILDERNESS)	NO-WILDERNESS/NO ACTION ALTERNATIVE
Impacts on Wilderness Values	Wilderness designation of the Carson-Iceberg WSA will result in a slight positive benefit for wilderness values. Long-term protection from unanticipated future actions that could result in potential adverse impacts will be provided. An increase of approximately 309 visitor-days of non-motorized recreation use for a total of 824 visitor-days will have a negligible impact on opportunities for solitude within the vicinity of the Carson Diver Trail. Livestock grazing use will continue at the existing 50 AUMs with no change in wilderness values anticipated.	There would be no significant impacts to wilderness values since there would be no projected surface-disturbing activities within the WSA, including motorized recreation use, timber harvest, and mineral development. An increase of approximately 309 visitor-days of nonmotorized recreation use would have a negligible impact on opportunities for solitude. Continued livestock grazing use of 50 AUMs would not result in any anticipated change in wilderness values.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Several comments were received during the wilderness inventory phase. Four, including one from the Alpine County Board of Supervisors, stated that the unit did not meet the inventory criteria because it contained less than 5,000 acres. Thirteen others supported the Bureau's position that the unit contained wilderness characteristics and noted that it was adjacent to a proposed USFS wilderness.

During the wilderness study phase, the Bureau held a public hearing in Bakersfield, California, and accepted written comments until February 15, 1988. No one submitted comments specific to this WSA.

The BOM submitted the only comment relative to the WSA, pointing out that an absence of mining claims does not conclusively prove a lack of significant economic mineral or energy resources. No other Federal, State, or County agency comments were received specific to the WSA.

Pit River Canyon

CA-020-103

PIT RIVER CANYON WILDERNESS STUDY AREA (WSA)

(CA-020-103)

1. THE STUDY AREA --- 10,984 acres

The Pit River Canyon WSA is located in the northwest corner of Lassen County, California 50 miles northwest of Susanville and 10 miles south-southwest of Bieber. The WSA includes 10,984 acres of Bureau of Land Management (BLM) lands with the mineral estate entirely in public ownership. There are no private inholdings within the WSA boundary. The WSA roughly takes the shape of an inverted triangle. The eastern boundary is defined by a Western Pacific railroad right-of-way and the interface between BLM and private land. The western boundary is defined by a BLM/private land interface for 9.25 miles and the paved Little Valley Road for the remaining 2.25 miles. The northern boundary from west to east is defined by a combination of dirt roads and BLM/private land interface (see Map 1 and Table 1).

The main feature of the WSA is a ten-mile-long canyon formed by the Pit River which traverses the unit. The canyon averages from one hundred to four hundred feet in depth with extremes to 750 feet. Either side of the canyon includes upland volcanic plateaus cut on the south by Horse Creek canyon, a major side drainage. The uplands support scattered juniper often in dense thickets on annual grasslands. Birchleaf and mountain mahogany, bitterbrush, Oregon white oak, and widely scattered Jeffrey and ponderosa pine are the major species present while the canyon bottom supports dense riparian vegetation such as willow, ash, and Carex.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Alturas Resource Management Plan/Environmental Impact Statement finalized in October, 1983. There were three alternatives analyzed in the EIS: an all-wilderness alternative, a partial-wilderness alternative designating 61% of the WSA as wilderness and a no-wilderness alternative.

2. RECOMMENDATION AND RATIONALE -

6,703	acres recommended for wilderness
4,281	BLM acres recommended for non-wilderness

The 61% partial wilderness is the recommendation for this WSA. 4,281 acres in this WSA are released for uses other than wilderness.

The all-wilderness alternative is the environmentally-preferred alternative; however, the partial-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts. In addition to the Federal acreage recommended for wilderness, BLM recommends that 740 acres of private land outside the WSA boundary be acquired and designated as wilderness. With acquisition of these adjacent private lands, a total of 7,443 acres are recommended for wilderness. Appendix 1 lists all acquisition and provides additional information on their acquisition.

Approximately 28% of the recommended area lies within the canyon rims of Horse Creek and Pit River and approximately 72% of the recommended area consists of upland areas outside the canyons. This area was found to have superior wilderness values. The naturalness in the core area is superior compared to the non-recommended portion. It bears virtually no imprints of man's presence and because of the steep topography and relative inaccessibility, the future integrity of the area is insured. Solitude is more easily attained due to the topographic features which isolate visitors from each other and from outside intrusions. The majority of recreational opportunities are due to the presence of the canyon and river. The river provides an excellent recreational fishery throughout its length and contains numerous other features such as high density raptor nesting habitat on the canyon walls, high archaeological values, and high scenic quality due to the steep canyon topography. The area has a Bailey/Kuchler ecosystem classification of Sierran Forest, Western Ponderosa Forest. This is currently represented in the National Wilderness Preservation System (NWPS) by only one small area in the Thousand Lakes Wilderness of approximately 815 acres.

Resource conflicts were not a significant issue in this area. Grazing use over much of the WSA will continue but is restricted by topography. Pit River Canyon itself is virtually ungrazed. The WSA has no known energy resources and mineral potential is considered low. There are currently only two oil and gas lease applications, no geothermal leases or lease applications, and two mining claims within WSA boundaries. The suitability recommendation will preclude use of approximately three miles of primitive motorized routes of travel.

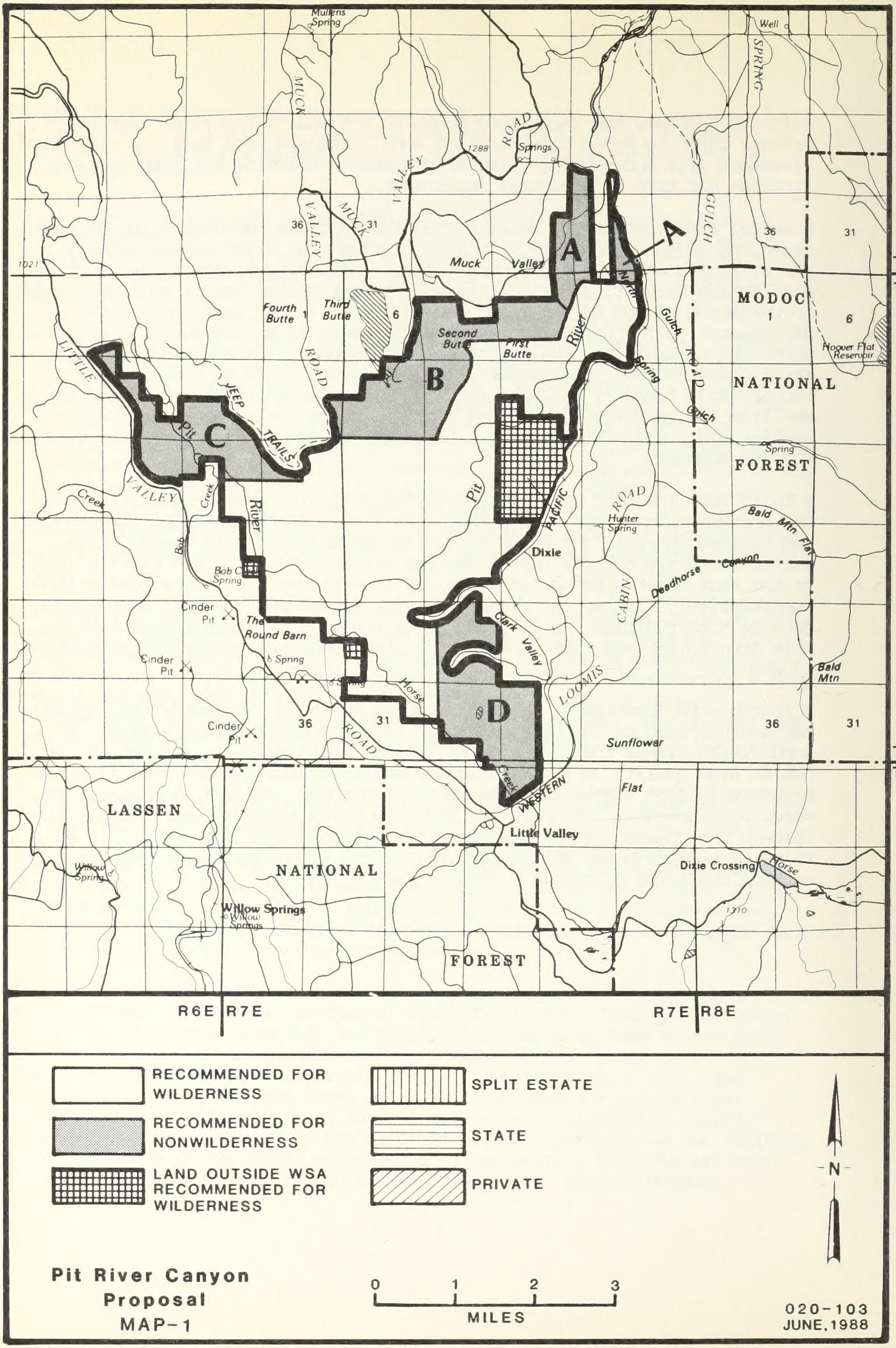
Areas recommended as non-suitable (A,B,C,D) differ markedly from recommended suitable areas with respect to their wilderness characteristics. The nonsuitable areas contain lower quality wilderness characteristics. Conflicting land uses on adjacent private lands impair solitude and unusual boundary configurations impair manageability for wilderness values. There are approximately five miles of routes of travel including primitive ways which will be available for vehicular use. Specific rationale apply to each of four areas deleted from the recommendation.

In the far northeastern corner of the WSA, the canyon is very shallow. Two narrow fingers of the WSA (denoted A) flank the shallow canyon. The canyon itself is in private ownership and could be developed at some future date. The eastern boundary is the railroad line which at this point is at canyon rim level and at some points within one-eighth mile of the river. The western boundary is private lands which are developed for agriculture. Private land activities west of the WSA boundary and within the canyon coupled with the proximity of the railroad negate opportunities for solitude in this portion of the WSA. Naturalness on the private lands is severely degraded by livestock grazing in the riparian zone. The recommended suitable boundary has been moved south to the end of the river segment of private lands to avoid this conflict zone. Natural rock barriers also deter livestock from encroaching this far downstream allowing the riparian zone to flourish and take on a natural appearance.

A second zone (denoted B) deleted from the suitable recommendation extends along the northern boundary from just northeast of First Butte westerly to the extreme southern end of Fourth Butte. Agricultural activities such as plowing and harvesting outside the WSA in Muck Valley impair solitude on the north-facing slopes of First and Second Buttes. Four ways and a water development on the open, flat terrain southwest of Second Butte render this area less natural than the canyon and river complex recommended as suitable. The recommended suitable boundary has been moved south to a more recognizable boundary which is the ridgeline between First and Second Butte and from Second Butte south along a ridgeline to the section line between section eight and seventeen. The boundary follows this section line west to the WSA boundary.

A third zone (denoted C) deleted from the suitable recommendation includes the northwestern corner of the WSA. The river canyon opens up into meadows and braided channels which are privately owned and heavily grazed. The public lands are outside the canyon and are restricted by the private lands to the east and the paved Little Valley road to the west. The public lands are relatively flat annual grasslands with insufficient visual screening to provide opportunities for solitude. The boundary has been pulled back in this area to an east-west line through the common quarter corner of sections 13 and 14.

A fourth zone (denoted D) deleted from the suitable recommendation includes the southern end of the WSA just north of the town of Little Valley. A subdivision flanks the east side of the WSA in this area. Naturalness is not as high quality as the recommended suitable area and evidence of man's presence is more apparent due to cherrystem roads, fencing, and livestock water developments. The boundary has been moved back to a north-south line through the common west-sixteenth corner between sections 29 and 32. At this point terrain has restricted vehicle and livestock encroachment and the natural character of the land remains intact.



Pit River Canyon Proposal
MAP-1

020-103
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	10,984
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		10,984
Within Recommended Wilderness Boundary		
		Acres
BLM	(within WSA)	6,703
BLM	(outside WSA)	740
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		7,443
Inholdings		
State		0
Private		0
Within Area Not Recommended for Wilderness		
		Acres
BLM	(surface and subsurface)	4,281
Split Estate	BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		4,281

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Pit River Canyon WSA is predominantly natural with negligible human imprints. There are nine small stockponds less than one acre in size and seven miles of ways which detract from the natural condition in some areas. Section 2, Recommendation and Rationale details these impacts and their effects on portions of the WSA. Visual screening and topography isolate the recommended suitable area which is virtually pristine in character. Livestock grazing impacts are negligible in the recommended portion due to topographic barriers. Water quality in the Pit River is low as the flow is totally adjudicated to upstream users and in the summer mainly consists of return flow from agricultural diversions. Water quantity in the Pit River varies from high spring flow of 5-10,000 cfs to less than 1 cfs

in late summer. Minimum flows have been adjudicated by the California State Water Resources Control Board. Working with the California Department of Fish & Game, it was determined that a minimum flow of 50 cfs was needed when the flow exceeded that level in spring and summer to maintain wildlife and riparian values. Water is being diverted around the Pit River Canyon for a small hydro-electric power project. The project is passing 50 cfs and during high flow periods the project can only divert a maximum of 700 cfs so the high spring flows are also continuing.

2. Solitude: The rugged nature of the topography of Pit River entrenched in high canyon walls with numerous twists and bends provide many outstanding opportunities for solitude. The area has the capacity to isolate visitors from the outside world as well as from other visitors to the area. The eastern boundary of the WSA is a Western Pacific railroad right-of-way. Throughout most of its length, however, the railroad is from four hundred to one thousand feet above the canyon floor and from one-quarter to one mile away from the canyon rim. The impact of the railroad along most of the eastern boundary does not significantly impact solitude. Solitude is impacted in some parts of the WSA due to topography, elongated boundary configurations, and non-conforming uses on adjacent lands. Solitude is impacted in the northeast and northwest corners and along the northern boundary where the Western Pacific railroad line is directly adjacent to the WSA, where activities on adjacent private lands conflict with wilderness management, and where the paved Little Valley Road flanks a narrow finger of the WSA.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The diversity of the area coupled with its rugged terrain and the presence of Pit River and Horse Creek, two perennial watercourses, provide outstanding opportunities for primitive and unconfined types of recreation. Canyon rims and bottoms provide scenic vistas and wildlife observation opportunities to cross-country hikers. The river itself is generally unsuited to white-water sports. Outside the recommended suitable area (canyon complex) opportunities for primitive and unconfined recreation are more limited due to flat terrain featuring minor relief features and common scenery.

4. Special Features: Pit River is noted for its high-density raptor nesting habitat on the high cliff walls which make up the canyon. Golden eagles and prairie falcons are the most notable species but red-tailed hawks, American kestrels, great horned owls, and barn

owls also utilize this habitat. The canyon provides an outstanding opportunity for the reintroduction of the endangered American peregrine falcon.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 10,984 acres of the Sierran Forest/Western Ponderosa Forest ecosystem. Wilderness designation of this WSA would add a large area to an ecosystem with only a single small area in the NWPS. There are presently only 815 existing wilderness acres in this ecotype. The vegetation in the WSA does not actually manifest itself as a true Western Ponderosa Forest but as a ponderosa forest/sagebrush steppe/oak woodland ecotone with much open annual grassland, brushland, and juniper woodland. Pine occurs in isolated enclaves. There are two other units in this ecotype which have been studied by the Redding Resource Area of the Ukiah District, Timbered Crater WSA (CA-030-201) and Lava WSA (CA-030-203) that have been given unsuitable recommendations.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
Sierran Forest/Western Ponderosa Forest	1	815	2	28,666
	CALIFORNIA			
Sierran Forest/Western Ponderosa Forest	1	815	2	28,666

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of six major metropolitan areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Sacramento	46	5,001,817	87	2,479,541
Redding	14	1,236,503	11	344,633
Chico	16	1,286,873	13	430,822
Marysville-Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809
Oregon				
Medford	31	2,440,081	21	730,038

3. Balancing the geographic distribution of wilderness areas: There are three existing units of the National Wilderness Preservation System within fifty miles of the Pit River Canyon WSA. These areas include one National Park Service unit, Lassen Volcanic National Park and two U.S. Forest Service areas, Caribou and Thousand Lakes wilderness areas. There is one other recommended suitable BLM WSA within fifty miles of Pit River Canyon.

C. Manageability

The entire WSA is manageable as wilderness. However, there is a significant difference in ease of manageability between the portion recommended for wilderness and the portion recommended for non-wilderness.

The recommended suitable portion can be easily managed as wilderness due to the ruggedness of the terrain which naturally limits vehicular access. The boundaries are easily recognizable and thus are easily managed.

The recommended nonsuitable portion is difficult to manage because of cherrystem roads and the presence of ways. Due to the flat, open terrain in this area, the roads provide off-road access at any point along their length. This off-road use impacts solitude. The lack of restrictive features to limit vehicular access makes these access routes difficult to close and impairs manageability.

The WSA contains no private inholdings; however, due to the configuration of the boundary there are three private parcels that, although outside the WSA boundary, project into the canyon. The WSA boundaries are not easily recognizable in these areas. Two of these parcels extend to the canyon bottom crossing the river, creating potential trespass problems which could restrict through-canyon access and ultimately recreational activities such as hiking and fishing through the canyon. The parcels comprise 740 acres recommended for acquisition through land exchange with willing owners.

Some flow of water through the canyon is necessary to maintain the aesthetic value of running water and pool reflections in the canyon. It is also needed for maintaining the wildlife and riparian habitat that provides the contrast of lush green vegetation in the canyon bottom. The flow does virtually cease during late summer months, however the scenic river pools are maintained throughout this period. This summer flow regime of less than 1 cfs had been occurring prior to October 1, 1976. A flow of 50 cfs fills the present channel through the canyon. It is needed to maintain wilderness values whenever water is flowing at or above the 50 cfs rate of flow.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at Time of Preliminary Suitability Recommendation:

The geology and mineralization of the Pit River WSA is described in the Alturas Resource Management Plan (RMP) completed December 5, 1983. BLM data in the Affected Environment section of the RMP EIS indicate the WSA is underlain by basalt and alluvium. There are no known occurrences of mineral resources. No oil and gas or geothermal leases have been filed in the WSA, and no mining activity has been observed.

The Pit River Canyon WSA EIS also references the absence of any potential mineral resources or previous mining activity.

2. Summary of Significant New Mineral Resource Data Collected Since Suitability Recommendation Which Should be Considered in the Final Recommendation: In May and June of 1984 the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines conducted mineral surveys of the suitable portion of the WSA. The results of the mineral surveys were published in 1986 in USGS Bulletin 1706-E. That report indicates that the Pit River Canyon WSA contains no identified mineral resources. Geochemical stream sediment sampling and analysis did not show anomalous concentrations of any element indicative of mineralized rock in the drainage area. Geophysical surveys showed the area to be typical continental

basaltic terrain. No mines or prospects were observed in the area, and rock types that typically host metal deposits are absent. The report summarizes the potential of the area for the occurrence of gold, silver, diatomite, oil and gas, and geothermal energy as low.

There is basalt suitable for aggregate and fill, but the same type of material is abundant closer to potential markets.

As of January 13, 1988 there were no unpatented mining claims on record located within the Pit River WSA. Because of the low potential for mineral resources, no mineral potential map was prepared for this document.

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION PARTIAL WILDERNESS	ALL-WILDERNESS ALTERNATIVE	NO-WILDERNESS ALTERNATIVE
Wilderness Values	Wilderness designation of 6,703 acres within the Pit River Canyon WSA would result in slight positive benefits to the wilderness values particularly naturalness and solitude due to the prohibition of motorized recreation use (100 visitor days). Development of three AMPs for livestock grazing would result in a slight benefit to naturalness due to establishing a rest-rotation grazing system to prevent overuse of pastures. The perception of naturalness would be impaired on a total of 200 acres from construction of a pit reservoir and a spring development. However, impacts would be highly localized and would not result in any significant impacts to solitude in relation to the entire WSA. Acquisition of 740 acres along the Pit Canyon and rim area would result in a slight benefit to naturalness and primitive unconfined recreation as well as special features such as raptor nesting habitat and scenic quality.	Wilderness designation would have a slight positive benefit on wilderness values particularly in the upland areas where motorized recreation use has diminished the perception of naturalness and sense of solitude. Development of three AMPs for livestock grazing would result in a slight benefit to naturalness due to establishing a rest-rotation grazing system to prevent overuse of 1300 acres along the canyon areas would benefit naturalness and primitive and unconfined recreation as well as special features including raptor nesting sites and scenic quality. Additionally, long-term protection from unanticipated future actions that could result in potential adverse impacts would be provided.	Continued motorized recreation use and livestock grazing would only diminish the wilderness values, primarily naturalness and solitude. Construction and maintenance of a proposed livestock project as well as maintenance of existing projects would result in highly localized minor impacts, with the perception of naturalness and the sense of solitude impaired on a total of 200 acres. Development of three AMPs for livestock grazing would result in a slight benefit to naturalness due to establishing a rest/rotation grazing system to prevent overuse of pastures. Opportunities for primitive and unconfined recreation would be slightly impaired in the upland areas, although the opportunities in the canyon areas would be retained. Acquisition of 740 acres along the Pit River Canyon would slightly benefit special features.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE	NO-WILDERNESS ALTERNATIVE
Wilderness Values (continued)	In the non-designated portion of the WSA, wilderness values would be only slightly diminished due to the continued and projected motorized recreation use (650 visitor days) as well as continued maintenance of existing livestock reservoirs.		
Motorized Recreation Use	There would be only negligible impacts on motorized recreation use as three miles of primitive vehicle routes would be closed with 100 visitor days foregone within the 6703 acres designated wilderness. There are other opportunities outside the WSA for motorized recreation use that are similar as well as continued access opportunities resulting from cherrystemmed roads, boundary roads and existing primitive vehicle routes within the non-designated portion of the WSA where use is projected at 650 visitor days.	The entire WSA would be closed to motorized recreation use, eliminating 700 visitor days of vehicle use. However, the majority of this use is associated with vehicle access for hunting which would continue to use boundary roads and existing cherry stem roads. Only minor adverse impacts are anticipated due to the overall low level of use.	There would be no impacts on motorized recreation use in the WSA. The current 700 visitor days would remain stable with the existing eight miles of primitive vehicle routes open for use.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final Environmental Impact Statement. Therefore no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Comments

1. Inventory phase: A large number of comments supported the designation of the area as a WSA. Others addressed extending the boundaries as a buffer zone for protecting the canyon and wildlife. A few letters favored multiple-use management, livestock management, and general recreation.

2. Study phase: A total of 67 comments were submitted, both oral and written, on the Alturas Resource Area draft resource management plan and environmental impact statement during the 90-day public comment period which ended July 15, 1983. Of the 67 comments, 55 made some reference to the wilderness portion of the RMP. A formal public hearing was held on May 23, 1983, in McArthur, California. The hearing was announced through a news release, personal communication and the Federal Register on April 20, 1983.

   Of the 55 written and oral comments received for the record, four indicated approval of the BLM DEIS Preferred Alternative in whole or part. Forty-seven recommended the all-wilderness alternative. One response recommended the no-wilderness alternative. Two comments proposed boundary modifications for the Pit River Canyon WSA. One comment took no position but questioned the overall adequacy of the entire document including wilderness.

   Most of those favoring wilderness designation believed there are not enough areas being protected to preserve their wilderness values. Following are the more common reasons given in support of wilderness designation for Pit River Canyon: It will provide maximum protection of vegetation, including riparian areas; it provides habitat for mammal and raptor species; archaeological sites will be protected; lack of resource conflicts; the areas add diversity to the California Wilderness System; and it preserves primitive recreational opportunities.

   Those supporting the preferred alternative believe the concerns for resources, local economic, and wilderness are in proper balance.

   No comments on the draft EIS were received from other government agencies which pertained to wilderness.

APPENDIX 1

ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION

PIT RIVER CANYON WSA (CA-020-103)

	LEGAL DESCRIPTION						TYPE OF OWNERSHIP BY ESTATE				ESTIMATED COST OF ACQUISITION	
PARCEL No.	TWNSHP	RNG	SEC	MERIDIAN	TOTAL ACREAGE	NUMBER OF OWNERS	SURFACE ESTATE	SUBSURFACE ESTATE	PRESENTLY PROPOSED FOR ACQUISITION	PREFERRED METHOD OF ACQUISITION	LAND COSTS ($1000)	PROCESSING COSTS ($1000)
1	36N.	7E.	9&16	MDM	660	1	PRIVATE	PRIVATE	YES	EXCHANGE	N/A	9.3
2	36N.	7E.	30	MDM	40	1	PRIVATE	PRIVATE	YES	EXCHANGE	N/A	6.2
3	36N.	7E.	23	SBM	40	1	PRIVATE	PRIVATE	YES	EXCHANGE	N/A	6.2

These figures were derived from Bureau Land Records and provide for more detail than GIS estimates and therefore may differ from acreage summaries in Table 1.

Tule Mountain

CA-020-211

TULE MOUNTAIN WILDERNESS STUDY AREA (WSA)

CA-020-211

1. THE STUDY AREA --- 17,860 acres

The Tule Mountain WSA is located in northeastern Lassen County, California with approximately 750 acres lying in southern Modoc County. The WSA is located twenty-five miles south of Alturas, California on the east side of U.S. Highway 395. The WSA includes 16,998 acres of Bureau of Land Management (BLM) land and 862 acres of private inholdings (see Map 1 and Table 1).

The WSA is roughly diamond-shaped. The northeastern boundary is an annually maintained dirt road known as the Tule Mountain Access Road. There are four places along this boundary where the WSA line deviates from the access road to exclude private land which intrude into the WSA. The southeastern boundary is an unimproved dirt road from McKabe Flat to the north end of Moon Lake continuing along the northwest shoreline to the south end of the WSA. The entire western boundary is a maintenance road which parallels the Southern Pacific Railroad. There are four exceptions along the boundary where private lands intrude into the WSA and the boundary is drawn to exclude these from the WSA.

The main feature of the WSA is a rounded mountain with its apex approximately centered in the unit. Elevation ranges from 4900' to 7098' which is the highest point of BLM land in the Alturas Resource Area. The mountain is drained by many shallow, intermittent drainages that are dry for most of the year. The WSA is in the sagebrush steppe ecotype with sagebrush-juniper being the dominant vegetative community. Upper elevations include approximately 150 acres of white fir/Jeffrey pine classified as commercial timber land.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and suitability recommendations were analyzed in the Alturas Resource Area Final Environmental Impact Statement of 1987. Two different suitability recommendations were analyzed in the EIS: an all-wilderness alternative and a no-wilderness alternative.

2. RECOMMENDATION AND RATIONALE -

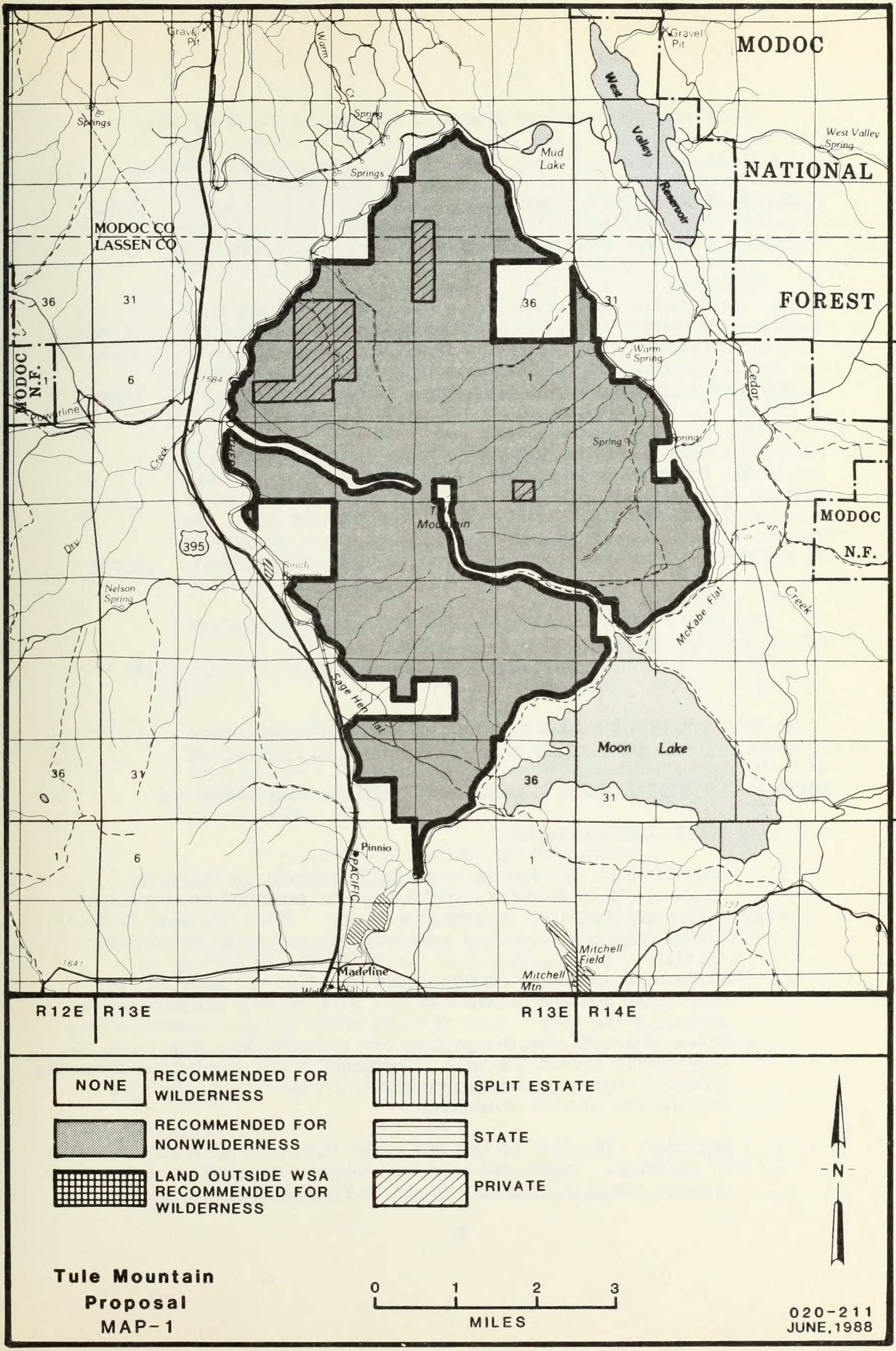
0	acres recommended for wilderness
16,998	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally-preferred alternative as it would result in the least change from the natural environment over the long term. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

Though the wilderness values described in Section 2(c) of the Wilderness Act are present in the WSA, the values were not considered of high enough quality to warrant wilderness designation. The WSA does not contain any significant single feature or combination of features such as vegetation, topography, wildlife, geology, or cultural and historic features. The sagebrush and juniper covered slopes are common to the area. Tule Mountain is similar to many other locations nearby. Shinn Peaks, Likely Mountain, McDonald Peak and many other nearby hills are similar in their appearance, differing only in that they have more roads or other man-made disturbances. There is nothing out of the ordinary that would distinguish Tule Mountain and make it a worthwhile addition to the National Wilderness Preservation System (NWPS).

The WSA is mostly natural with the exception of numerous ways. The unit is nearly bisected by the two cherrystemmed roads both going to the top of Tule Mountain. The two roads come within less than one-half mile of meeting. There are approximately 20 miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use. It is expected to remain in a relatively natural condition regardless of wilderness designation due to lack of resource demands. Resource conflicts were not a factor in the non-suitable recommendation.

Visitor use is low in the WSA with the exception of seasonal use for mule deer and upland game hunting opportunities. The low visitor use reflects the lack of variety and diversity of recreational opportunities as well as lack of special features.



Tule Mountain Proposal
MAP-1

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	16,998
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		862
Total		17,860
Within Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		Acres
State		0
Private		0
Within Area Not Recommended for Wilderness		
BLM	(surface and subsurface)	16,998
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		16,998

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA is essentially natural in character. Naturalness is somewhat impaired by the presence of eight ways with a sum total of 20 miles in length. There are also 24 small livestock stock ponds and approximately two miles of hand-cut fireline. Two cherrystemmed roads identified during the wilderness inventory penetrate the WSA from the east and west boundaries and end within one-half mile of each other near the center of the unit. Each of these roads is approximately three miles in length. Although they are technically outside the WSA, they nearly bisect the unit. Topographic and vegetative screening absorb enough of these impacts that, on the whole, the area retains its natural character.

2. Solitude: The size of the WSA lends itself to achieving a feeling of solitude. Topographic and vegetative screening serve to enhance the ability of a visitor to find seclusion from other

visitors to the area. With the exception of infrequent maintenance of range improvement and off-highway vehicle use on the numerous ways, there are no activities within the WSA which would detract from the solitude a visitor would experience. The viewshed from the mountain includes the towns of Likely and Madeline, U.S. Highway 395, and a now inactive Southern Pacific Railroad line. Sounds of the highway are audible from much of the WSA.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Large size, topography, and vegetation provide opportunities for primitive and unconfined types of recreation such as hiking, horseback riding, hunting, etc. The area does not possess any unique natural features, diverse or challenging terrain to provide outstanding recreation opportunities. Very little non-motorized recreational use of the area has been observed.

4. Special Features: The WSA contains no special features.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 16,998 acres of the Intermountain Sagebrush/Sagebrush Steppe ecosystem. The Tule Mountain WSA would not be a significant addition to the diversity of the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
	NATIONWIDE			
Intermountain Sagebrush/ Sagebrush Steppe	3	76,699	136	4,353,342
	CALIFORNIA			
Intermountain Sagebrush/ Sagebrush Steppe	1	31,295	4	135,433

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of six major metropolitan areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Sacramento	46	5,001,817	87	2,479,541
Redding	14	1,236,503	11	344,633
Chico	16	1,286,873	13	430,822
Yuba City	44	4,951,805	85	2,459,500
Oregon				
Medford	31	2,440,081	21	730,038
Nevada				
Reno	39	4,647,230	175	6,904,809

3. Balancing the geographic distribution of wilderness areas: There is one existing unit of the NWPS within 50 air miles of the Tule Mountain WSA. The unit is the South Warner Wilderness managed by the USFS. There are seven other recommended suitable BLM WSA's within 50 air miles of Tule Mountain WSA: Pit River Canyon, Tunnison Mountain, Skedaddle Mountain, Dry Valley Rim, Twin Peaks, High Rock Canyon, and Massacre Rim.

C. Manageability

The Tule Mountain WSA is manageable as wilderness, although some management problems do exist. The WSA contains four inholding parcels totalling 862 acres. These parcels are grazing land that have a few range improvement facilities such as stock ponds, spring developments, and windmills. Use of these lands is not likely to change in the near future; however, landowners will want to maintain access using existing ways as vehicular access to maintain and improve existing facilities on their lands.

Though road closures could be implemented on the 20 miles of existing ways in the WSA, an estimated 75% of the closures would be ineffective at preventing continuing vehicle use. This is especially true during the deer season. In most areas cross-country access is not adequately restricted by terrain to prevent circumventing road barriers. Solitude and naturalness would continue to be subject to impairment despite management efforts.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitable recommendation: The geology and mineralization of the Tule Mountain WSA is described in the Alturas Resource Area Resource Management Plan (RMP) completed December 5, 1983. The WSA contains commercial flat rock. The occurrence of medium to fine grained basalt that weathers into flat plates 1.5 to 4 inches thick was documented near the top of Tule Mountain.

   Unknown potential Geology-Energy-Mineral (GEM) resources may exist within the WSA for geothermal or hot water resources. Two areas outside the WSA but within a quarter mile of the WSA boundary contain warm springs (S1/2 sec. 22, T. 39 N., R. 13 E., and NE1/4 sec. 6, T. 38 N. R. 14 E.) A region of geothermal potential includes the north half of the WSA.

   The mineral potential of this area is low. The basalt found near the top of Tule Mountain could be used as a decorative stone called flat rock or lava moss rock, but this deposit has not been exploited due to poor access and because flat rock is available from other locations. The geothermal resources in this area could be used for direct heat, but there are no known geothermal resources considered hot enough for power generation.

   There are no existing mining claims.

   Approximately 1,600 acres were under lease for oil and gas. These are highly speculative as potential for discovery or production is considered very low.

2. Summary of significant new mineral resource data collected since suitability recommendation which should be considered in the final recommendation: Since the area was recommended as non-suitable for wilderness designation there were no mineral surveys conducted by the U.S. Bureau of Mines and/or the U.S. Geological Survey. The two non-competitive oil and gas leases have been terminated due to nonpayment. A search of BLM records on March 25, 1988 indicated that there are no mining claims or mineral leases in the WSA.

BLM has not received any new information from any source about mineral resources since the final EIS was published. Because of low potential for mineral resources no mineral potential map was prepared for this WSA.

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCE	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Wilderness Values	There would be slight to minor impacts on naturalness, solitude, and primitive and unconfined recreation throughout the WSA except for short-term and localized adverse impacts. Continued motorized recreation use (1,100 visitor days) would result in a minor impact to naturalness as well as short-term moderate impact to solitude during the two week deer hunting season. The prescribed burn would have a minor short-term impact on naturalness within the 2,000-acre burn area with minor impacts to solitude over the three day operation. Timber harvesting would impair naturalness within a 151 acre area and disrupt solitude for two months every 20 to 30 years. Other activities including fuelwood harvesting and maintenance of existing livestock facilities would result in negligible to minor localized impacts particularly to solitude.	Wilderness designation would have a slight benefit on wilderness values. As a result of precluding existing motorized recreation use, timber harvesting, and fuelwood cutting wilderness values would be retained and slightly enhanced, particularly naturalness and solitude. Additionally, long-term protection from unanticipated future actions that could result in potential adverse impacts would be provided.
Motorized Recreation Use	There would be no impact on motorized recreation use in the WSA. The current 1,100 days of motorized recreation use would remain stable with the entire WSA open to motorized vehicle use including 20 miles of primitive vehicle	Motorized recreation use totalling 1,000 visitor days would be foregone. This would result in a minor impact as the WSA would continue to have vehicle access, particularly for hunting, available around the perimeter from boundary

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCE	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Motorized Recreation Use (Cont'd)	use including 20 miles of primitive vehicle routes.	roads and from six miles of cherry stemmed roads which penetrate the central portion of the WSA.
Livestock Grazing and Range Improvements	There would be no impact on livestock grazing and range improvements. A 2,000-acre prescribed burn would be permitted resulting in an increase of 66 AUMs for a projected total of 2,636 AUMs.	An increase of 66 AUMs, or less than three percent of the current 2,570 AUMs allotted within the WSA would be foregone as a result of precluding a proposed 2,000-acre prescribed burn. This would result in a slight impact on livestock grazing and range improvements.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final Environmental Impact Statement. Therefore no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Comments

A total of 67 comments were submitted, both oral and written, on the Alturas Resource Area draft resource management plan and environmental impact statement during the 90-day public comment period which ended July 15, 1983. Of the 67 comments, 55 made some reference to the wilderness portion of the RMP. A formal hearing was announced through a news release, personal communication and the Federal Register on April 20, 1983.

Of the 55 written and oral comments received for the record, four indicated approval of the BLM DEIS Preferred Alternative in whole or part. Forty-seven recommended the All-Wilderness Alternative. One response recommended the No-Wilderness Alternative. Two comments proposed boundary modifications for the Tule Mountain WSA. One comment took no position but questioned the overall adequacy of the entire document including wilderness.

Most of those favoring wilderness designation believed there are not enough areas being protected to preserve their wilderness values. Following are the more common reasons given in support of wilderness designation for Tule Mountain: It will provide maximum protection of vegetation, including riparian areas; it provides habitat for mammal and raptor species; archaeological sites will be protected; lack of resource conflicts; the area adds diversity to the California Wilderness System; and it preserves primitive recreational opportunities.

Those supporting the preferred alternative believe the concerns for resources, local economic, and wilderness are in proper balance. No comments on the draft EIS were received from other government agencies which pertained to wilderness.

Tunnison Mountain

CA-020-311

TUNNISON MOUNTAIN WILDERNESS STUDY AREA (WSA)

(CA-020-311)

1. THE STUDY AREA --- 20,437 acres

The Tunnison Mountain WSA is located in Lassen County, California. The WSA contains 19,884 acres of Bureau of Land Management (BLM) land and 553 acres of private land located in 13 parcels varying in size from 10 to 160 acres. The nearest cities are Susanville, California, located seven miles southwest, and Reno, Nevada 80 miles southeast of the WSA (see Map 1 and Table 1).

The WSA boundary is a mixture of dirt roads, non public land, and on the south, an unnatural logged area. Beginning in the north, the WSA's western boundary follows Horse Lake Road, an unnamed four mile dirt road, and private land. On the south, the boundary extends southeast around private land and follows a low ridge south of, and adjacent to, Willow Creek Canyon. This 1-1/2 mile segment of the southern boundary marks the northern side of an unnatural area deleted from the WSA during the initial inventory study because of the impacts of past logging activities. The southern boundary continues southeast extending around one mile of a cherrystemmed road then follows an unnamed road southeast three miles to private land. On the east, the boundary extends north along Pete's Valley Road, private land, around a 1-1/2 mile cherrystem road, along more private land and then extends northwest along the Pete's Valley-Mapes Spring road to Horse Lake Road.

The WSA is approximately 3-1/2 miles wide by 10 miles long. Elevations vary from 4200' to 6400'. Three topographic features dominate the WSA: Horse Lake Mountain, a 5-1/2 mile long north-south ridge in the northern half of the WSA, Tunnison Mountain, a 4-1/2 mile long northwest-southeast ridge in the southern half of the WSA and Willow Creek Canyon, a 50' to 200' deep canyon that flows 6-1/2 miles west to east through the WSA. Both Horse Lake and Tunnison Mountains are relatively narrow (one to three miles wide) with numerous small peaks along their ridge crests. These mountains consist of an almost continuous chain of small ridgecrest peaks with numerous drainages of various widths and depths radiating from the ridgecrest. Most of the drainages flow into Willow Creek. Many small springs seep from the lower southern and eastern slopes of Horse Lake Mountain. Numerous stringer meadows are located around and below these springs.

Willow Creek is a perennial stream that bisects the southern edge of the WSA. The stream forms a shallow wooded canyon on the western edge of the WSA and gradually cuts deeper into the lava terrain as it flows east. The eastern three miles of Willow Creek form a winding "U" shaped canyon 100 to 200 feet deep in a dry sage/grassland area. Willow Creek's riparian vegetation is in fair to good condition above the confluence with Pete's Creek where a juniper pine woodland exists. Below the confluence, condition is fair to poor. Willow Creek Canyon contains one of the higher quality perennial streams throughout the region and is the most distinctive physical feature in the WSA.

Plant life is primarily bunch grasses, annual grasses, sagebrush, scattered juniper and isolated patches of mountain mahogany at the higher elevations in the majority of the WSA located north of Willow Creek. The riparian vegetation along Willow Creek includes sedges, grasses and occasional willows. Scattered ponderosa pine and juniper also grow within the segment of Willow Creek Canyon above Pete's Creek as well as throughout the area between Willow Creek and the WSA's southern boundary. No threatened or endangered plant species occur within the WSA.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various alternatives were analyzed in the Draft and Final Eagle Lake-Cedarville Wilderness Environmental Impact Statement (EIS). Four (4) different alternatives were analyzed in the EIS: partial wilderness where 39% of the WSA would be designated wilderness, partial wilderness where 73% of the WSA would be designated wilderness, all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE --- 7,889 acres recommended for wilderness
11,995 BLM acres recommended for non-wilderness

Thirty-nine percent partial wilderness is the recommendation for this WSA. 11,995 acres in this WSA are released for uses other than wilderness.

The all-wilderness alternative is the environmentally preferred alternative because it would result in the least change from the existing natural environment over time. The selected alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The part of the WSA recommended for wilderness designation is recommended primarily because the area contains good wilderness qualities. The areas not recommended for wilderness have manageability problems or have resource conflicts with future utility corridor alignments.

The recommended wilderness area provides good opportunities for solitude and primitive recreation in a natural setting. The area's two main topographic features, Tunnison Mountain and Willow Creek Canyon, afford numerous places where the visitor can experience solitude and enjoy exploration, hiking and sightseeing. Willow Creek Canyon supports a trout fishery where trophy-size German browns can be caught. Petroglyphs can be seen along the canyon walls. The canyon extends from a wooded pine forest into the arid Great Basin. Widely varied scenery and plants accompany this transition within the WSA. Tunnison Mountain is a varied mix of ridges, stringer meadows, mountain mahogany thickets and open slopes. Numerous terrain and vegetation variations afford good opportunities for solitude and exploration. Contrasting views of the lush Willow Creek Valley to the west and the arid Tablelands and desert peaks to the east reward those who hike to the top of Tunnison Mountain's ridgecrest summit.

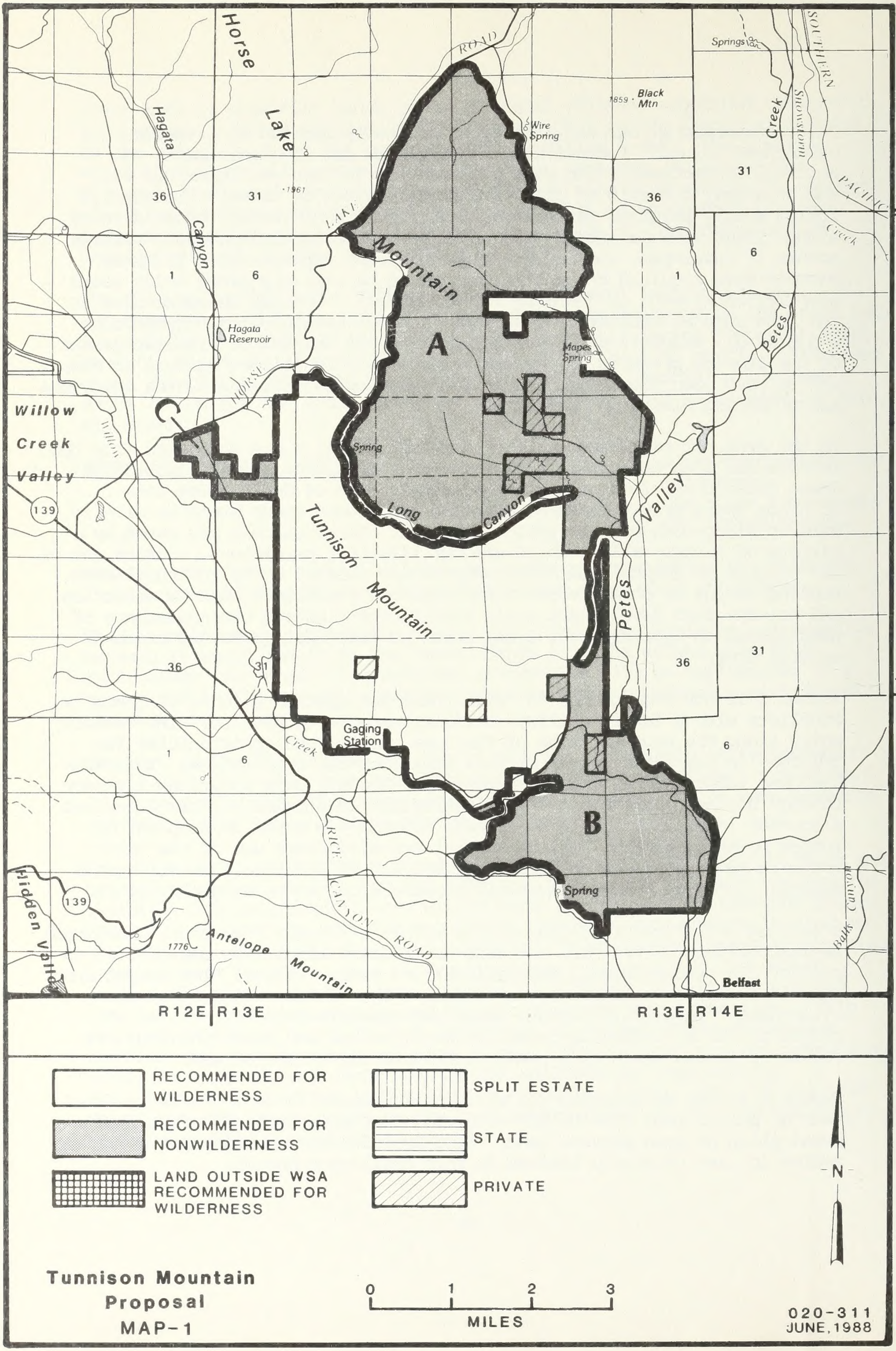
The recommended wilderness area could be easily managed to preserve wilderness values. Because wilderness values are so significant, the suitability recommendation will preclude any further vehicular use of approximately one mile of primitive access routes of travel. Boundaries follow mostly physical features or legal lines where rocky, brush-covered slopes limit vehicle entry. Two 40-acre private inholdings could require access if developed, and would adversely affect naturalness. If these parcels were acquired the entire area would be publicly-owned which would simplify management of the area for wilderness. Present resource uses of the area such as recreation (hunting, fishing, archeological sightseeing and hiking), wildlife and livestock grazing are compatible with management of the area to preserve wilderness values. No significant mineral or energy values have been identified within the recommended wilderness area and there are no mining claims in this area.

In the area not recommended for wilderness, Parcel A was separated from the recommended area because of management conflicts with private inholdings. These parcels are located along the eastern side of South Horse Lake Mountain where private land development and access roads would be clearly evident along much of this part of the WSA. These parcels are owned by a variety of owners, all of which are not livestock permittees. Future use of the parcels is unknown, but ownership is not related to agricultural uses. Hunting cabins or other recreational uses are feasible. Road construction and private land development could significantly affect the appearance of naturalness on approximately 2,020 acres of this open grass and brush-covered area.

Parcel B is not recommended for wilderness designation because of resource conflicts with a future utility corridor, management problems with vehicle entry along the southern side of the area and limited opportunities for solitude in the eastern half of this area's broad, open slopes. This area has been identified as part of a potential trans-Sierra powerline corridor through northern California. No construction is planned at this time, but alignment identification is considered necessary now for development of future power corridors. This potential non-wilderness use of the WSA's southern side was deemed a more important use of the area than wilderness designation of an area of generally nondescript wilderness qualities.

A section of Willow Creek Canyon lies within this area. However, the canyon is inaccessible to vehicles and does not require wilderness designation to protect its archeological, recreational and scenic values. The canyon also comprises only a small portion of Parcel B that is not recommended for wilderness. In parcels A and B there are approximately 3-1/2 miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use.

Parcel C is not recommended for wilderness because it is a narrow isolated neck of public land 1/4- to 1/2-mile-wide that extends 1-1/2 miles into a broad plain of open private land. Opportunities for solitude and primitive recreation are extremely limited in this small open parcel.



Tunnison Mountain Proposal
MAP-1

Table 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	19,884
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		553
Total		20,437
Within the Recommended Wilderness Boundary		**Acres**
BLM	(within WSA)	7,889
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		7,889
Inholdings[1]		
State		0
Private		80
Within the Area Not Recommended for Wilderness		**Acres**
BLM	(surface and subsurface)	11,995
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		11,995

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[1] Appendix 1 is a detailed description of inholdings and split estate tracts included within the study. For purposes of this report, split estate lands are defined only as those lands with Federal surface and non-Federal subsurface (minerals). Lands that have federal minerals but non-Federal surface should be classified in this report by the owner of the surface estate.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Tunnison Mountain WSA is predominantly natural with human imprints unnoticeable in the area as a whole. Tunnison Mountain, the southern end of Horse Lake Mountain and Willow Creek Canyon are the predominant features within the WSA. These areas appear natural with minimal evidence of man's presence. Sagebrush and grasses dominate most of the WSA. Scattered patches of mountain mahogany are located beneath shaded rims and the higher elevations. South of Willow Creek Canyon, junipers are interspersed with scattered ponderosa and Jeffrey pine.

   Scattered junipers located inside the WSA along portions of the southern boundary road and the cherrystemmed road to the crossing were cut for firewood prior to 1976. Scattered juniper stumps and decaying limbs appear unnatural in this area but the overall effect is slight and temporary.

   The overall influence of human imprints on the naturalness of the area as perceived by the average visitor is negligible. Human imprints are small in scale - mainly related to livestock grazing such as, 5-1/2 miles of fence, nine stock ponds, two developed springs, and 4-1/2 miles of access ways leading to ridgecrests and Willow Creek. The ways are used for hunting and fishing access. The ways and water developments are substantially unnoticeable, due to the broken terrain and screening by adjacent brush.

   Three cherrystemmed roads extend seven miles within the WSA but have little affect on naturalness. Long Canyon Road nearly splits the WSA in half, but because of its location in a narrow canyon bottom and its primitive condition, it does not adversely affect the experience of naturalness in this area. Rocky, brush-covered slopes limit off-road travel from this cherrystemmed road and therefore, no significant impacts to naturalness have occurred from off-road vehicle travel. The cherrystemmed road that extends one mile toward the crossing on Willow Creek passes through level open terrain. Off-road access is possible from this road but to date has not caused any significant impacts to naturalness in the area. A third cherrystemmed road parallels the eastern boundary for 1-3/4 miles. There has not been any significant amount of off-road travel from this road and therefore, no impacts to naturalness have occurred.

2. Solitude: Opportunities for solitude are good throughout the recommended wilderness area. Many small drainages break up the topography and afford good opportunities for isolation of visitors. Willow Creek Canyon and Long Canyon also afford good areas for isolation. Livestock operator travel within the WSA is seasonal and infrequent. A seasonal influx of fishermen during the first week of fishing season in early May temporarily disturbs

opportunities for solitude, but the number of fisherman quickly declines after the first week of the season. Dove season in September and deer season in October bring an influx of hunters that temporarily disturb solitude. This impact is brief and seasonal.

In the eastern portion of Area B's broad open slopes and through Area C (see Map 1) opportunities for solitude are limited by the open terrain and lack of good vegetative screening. Open slopes along the lower eastern side of Area A also limit good opportunities for solitude in this area.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Willow Creek Canyon is the primary attraction in the WSA for primitive and unconfined recreation. The canyon affords a mixture of scenery, topographic variations, aquatic habitats, varied plant life, archeological resources and wildlife observation opportunities. Day hikes and fishing are well suited to this area. Backpacking is also possible; however, the canyon's relatively short length does not lend itself to extended outings. Tunnison Mountain and Horse Lake Mountain offer opportunities of hiking, horseback riding, wildlife observation and exploration.

4. Special Features: The area does not contain any unique geological, biological or historic features that would be notable as special features.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 19,884 acres of the Intermountain Sagebrush/Sagebrush Steppe ecosystem. Wilderness designation of the Tunnison Mountain WSA would not add a new ecosystem or landform to the NWPS. This WSA is in the sagebrush-steppe desert ecosystem. At the present time, there are two existing wilderness areas (Jarbidge and South Warner) within this ecotype.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classifications Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
Intermountain Sagebrush/ Sagebrush Steppe	3	76,699	136	4,350,455
	CALIFORNIA			
Intermountain Sagebrush/ Sagebrush Steppe	1	31,295	4	132,546

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: This WSA is within a five-hour drive of six major population centers. Table 3 summarizes the number and acreage of designated wilderness areas and other BLM wilderness study areas within a five-hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	area	acres	areas	acres
California				
Chico	16	1,286,873	13	430,822
Redding	14	1,236,503	11	344,633
Sacramento	46	5,001,817	87	2,479,541
Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809
Oregon				
Medford	31	2,440,081	21	730,038

3. Balancing the geographic distribution of wilderness areas.: The WSA is within a 50 mile radius of six BLM WSA's recommended for wilderness designation. The South Warner Wilderness, administered

by the Modoc National Forest, the Caribou Wilderness administered by Lassen National Forest and the Lassen National Park Wilderness are all within 50 miles of the Tunnison Mountain WSA.

C. Manageability

The entire WSA is manageable as wilderness; however, management of the area not recommended for wilderness would require more effort to preserve wilderness qualities than management of the area recommended for wilderness. Additionally, wilderness values on public lands located in the northeastern half of the WSA may be adversely affected by development of private lands located along the eastern slopes of South Horse Lake Mountain.

The area recommended for wilderness is manageable with no significant resource conflicts or vehicle control problems. Boundaries follow legal lines located away from access roads or follow the edge of rocky, brush-covered slopes where vehicle entry has not occurred. Vehicle access routes used by hunters, fisherman, and livestock operators are located outside the recommended wilderness area. The area is used for livestock grazing, hunting, fishing and is valuable wildlife habitat for wintering deer, antelope and sage grouse. All of these uses are compatible with management of the area for wilderness.

Two undeveloped 40-acre parcels of private land are located within the area recommended for wilderness. If the landowners develop these parcels, access would be required. Both parcels are not owned by livestock operators and future use of the parcels is unknown. If development occurred that required vehicle access, approximately one mile of road construction would be needed to each parcel. This would adversely impact naturalness in the area surrounding each road; however, scattered junipers and brush would provide good screening from the area along Willow Creek where much of the area's visitor-use would be expected to occur. Impacts to solitude would depend on the type and extent of proposed uses on these parcels. If the parcels were acquired, impacts to naturalness or solitude would not occur from private land development.

Management to preserve wilderness qualities would be difficult in Parcel A of the area not recommended for wilderness (see Map 1). In this area there are four blocks of private land that are within or extend into the WSA. None of these parcels are owned by livestock operators. If these parcels were developed for hunting cabin use, up to 4-1/2 miles of access roads would be needed. Both the roads and structures would be apparent in the relatively narrow (two-mile-wide) area east of the South Horse Lake Mountain ridgecrest that comprises the bulk of the WSA north of the recommended wilderness area. Management to preserve wilderness qualities of solitude and naturalness in this relatively small narrow area would be compromised by activities on adjacent private lands centrally located within the area.

In Parcel B (see Map 1) of the area not recommended for wilderness, management to control vehicle entry from the southern boundary road would be difficult. In this area, broad, open terrain is vehicle-accessible along the entire three-mile southern boundary road. Increased management efforts would be necessary to insure compliance with the non-motorized provisions of wilderness.

In Parcel C (see Map 1), control of vehicle entry would also require increased management effort to insure compliance with the non motorized provisions or wilderness. This parcel is a narrow 1/4- to 1/2-mile-wide neck of public land that extends 1-1/2 miles northwest into the level plain of Willow Creek Valley. It is surrounded by private land and is readily accessible to vehicles. While prohibition of vehicle entry could be achieved, the low wilderness qualities of this parcel, and limited opportunities for solitude and primitive recreation do not warrant the management action necessary to preserve a marginal wilderness resource in this area.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at the time of preliminary suitable recommendation: The geology of the Tunnison WSA is described in the Willow Creek Unit Resource Analysis (URA) completed in 1981. BLM data in the Affected Environment section of the Eagle Lake-Cedarville Wilderness Environmental Impact Statement (EIS) completed May 20, 1987, indicates the WSA had no known occurrences of mineral resources.

   The potential for oil and gas was unknown, there were no oil and gas leases within the study area, and there had been no interest expressed in possible future leasing. The entire WSA was classified as prospectively valuable for geothermal resources by the U.S. Geological Survey (USGS) (R.G. Wayland and Miller, 1968).

   The area had no past history of mining, nor was there any evidence of prospecting or mineral development. No unpatented mining claims existed in the WSA as of May 1987.

   There had been little demand for salable minerals, with no commercial deposits or occurrences known to exist.

2. Summary of significant new mineral resource data collected since suitability recommendations which should be considered in the final recommendation: During the summer of 1985, the U.S. Bureau of Mines (BOM) and the USGS conducted a mineral survey to assess known mineral resources and the mineral resource potential of the study area. The results of the mineral survey were published in USGS Bulletin 1706-B in 1988. Based on field examination,

literature search, geochemical sampling, and geophysical evaluation, the WSA was determined to have low or no potential for mineral resources.

The study area was determined to have a low potential for geothermal because the closest warm water wells are approximately 10 miles south of the WSA. Scott (1983) assigned the Tunnison Mountain WSA a "low to zero" potential for oil and gas. Both USGS and BOM agree with Scott's findings. There are no oil and gas or geothermal leases within the WSA.

Sand and gravel occurrences were not considered to be economically viable resources due to the small reserve volumes. Other nonmetallic commodities were also believed to have low potential for development due to poor access and insufficient reserve quantity. Geochemical sampling failed to identify any anomalous metallic mineral values and the lack of suitable host rock, veins or visibly altered bedrock suggest that metallic mineral deposits are absent in the WSA (Bulletin 1706-B). According to BLM records dated January 13, 1988, no mining claims are located within the WSA. Due to the low mineral potential of the area, no mineral potential map was prepared for this WSA.

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION PARTIAL WILDERNESS 39% Wilderness	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE 73% Wilderness	NO-WILDERNESS ACTION ALTERNATIVE
Wilderness Values	Range improvement structures would improve overall naturalness throughout the entire 20,438-acre WSA. Local disturbance would be less than 1 acre on 2 reservoir sites and 5 miles of fence in the wilderness portion with no surface disturbance. The perception of naturalness would be reduced on 350 acres. Solitude would be only in the wilderness portion by closure of 1 mile of way, eliminating 150 visitor-days of use. Access to private land inholdings could require 2 miles of road in the wilderness portion which would impact naturalness solitude & primitive recreation & impair the perception of naturalness on 500 acres. In the non-wilderness portion access to private parcels that might be developed for	Range improvement structures would improve overall naturalness but locally disturb less than 1 acre each on 2 reservoir sites. 12 miles of fence are proposed with no surface disturbance. The perception of naturalness would be reduced on 570 acres. Solitude and primitive recreation would be assured by closure of 4-1/2 miles of way & 7 miles of cherry-stemmed road thus eliminating 600 visitor-days of OHV use. Access to private inholdings which could be developed for cabins would require 6-1/2 miles of road.	Range improvement structures would improve overall naturalness but locally disturb less than 1 acre each on 2 reservoir sites and 10 miles of fence in the wilderness portion. In the non-wilderness portion naturalness would be reduced due to 2 miles of new fence. Solitude would be only slightly improved by closure of 1 mile of way, eliminating 150 visitor days of Access to private land inholdings in the wilderness portion would require 4 miles of road which would disturb naturalness,solitude,and primitive recreation In the non-wilderness portion up to 2 miles of access might be needed. In the non-wilderness part of the WSA there would be 3 miles of powerline built in a proposed utility corridor which would impact naturalness, solitude and primitive recreation on up to 3,000 acres.	All the impacts would be the same as the Proposed Action except the 1 mile of way would not be closed.

Table 4 - Comparative Summary of the Impacts by Alternative (Continued)

ISSUE-RELATED RESOURCES	PROPOSED ACTION PARTIAL-WILDERNESS 39% Wilderness	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE 73% Wilderness	NO-WILDERNESS ACTION ALTERNATIVE
Wilderness Values (Cont'd)	cabins would need about 4-1/2 miles of road reducing the perception of naturalness on up to 2,020 acres. In the non-wilderness portion there would be 3 miles of powerline built in a proposed utility corridor that would impact naturalness, solitude & primitive recreation on up to 3,000 acres.			
Recreational ORV Use	No significant impact as only 1 mile of way would be closed. 150 visitor-days of OHV use in the designated portion would be displaced. Vehicle recreation would increase to 600 visitor-days in non-wilderness, in part, as a result of the closure of the designated portion	Closure of 4-1/2 miles of way & 7 miles of road would reduce vehicle use visitor-days by 600.	No significant impact as only 1 mile of way would be closed. 150 visitor days of ORV use in the designated portion would be displaced. Use would increase to 600 visitor-days per year in the non-wilderness portion.	No impact as no ways or cherrystemmed roads would be closed. Use is expected to remain at 600 visitor-days for the foreseeable future.
Trans Sierra Utility Corridor	No impact as a 3 mile portion of powerline could be built in the proposed utility corridor in the non-wilderness portion	No powerline could be built in the proposed utility corridor An alternate location would have to be found outside the WSA.	No impact as 3 miles of powerline could be built in the proposed utility corridor in the non-wilderness portion.	No impact as the 3 miles of powerline could be built in the proposed utility corridor.

F. Local Social and Economic Considerations

No significant local, social or economic considerations were identified through the public input process used to develop the environmental impact statements for the wilderness study of the WSA. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain comments received during the inventory process and early stages of EIS preparation were used to develop significant study issues and alternatives for wilderness management.

A technical review team (TRT) was also used to help identify issues and formulate the alternative analyzed in the EIS. It was used as a tool to lessen the chances of polarization between interest groups and to provide the Bureau with high quality public input, representative of the positions of key groups interested in or affected by wilderness designation. Input provided by the TRT was used in developing the wilderness recommendations for this WSA.

For the Eagle Lake-Cedarville Wilderness EIS that included the Tunnison Mountain WSA, the Susanville District Advisory Council identified the following interests and resources to be represented on an eight-member TRT: livestock-adjacent landowners; wildlife agencies-sportsmen; wilderness-environmental-dispersed recreation; mineral-energy-utilities, wild horses; motorized recreation; cultural-historical-archeological;and the Bureau of Land Management. The representatives were very knowledgeable and highly respected members of their interest groups. The TRT members toured the WSA, held lengthy discussions spanning many weeks and eventually reached unanimous agreement that a partial-wilderness recommendation was appropriate for the Tunnison Mountain WSA. The team's recommendation of 39% suitable and 61% non-suitable was supported by the Susanville District Advisory Council and by BLM and is the recommended action for this WSA.

Key issues raised through public involvement and analyzed by the TRT and in the EIS were: the quality of the wilderness resource and how much was appropriate to be preserved and managed as wilderness; concern that wilderness would prevent livestock management activities and motorized recreation access for hunting; concern that wilderness would preclude development of potential high-voltage electric transmission lines through the region. Identification of Willow Creek's features that contribute to wilderness experience within the WSA--petroglyphs, high scenic quality, excellent wildlife values,and good recreation opportunities particularly fishing in Willow Creek. All of these issues were addressed in each of the four alternatives analyzed in the EIS: all wilderness, partial wilderness (39% suitable, 61% nonsuitable) partial wilderness (73% suitable, 27% nonsuitable) and no wilderness.

During formal public review of the draft EIS, a total of 342 comments were received that addressed this WSA specifically or as part of general comments on all WSA's in the draft EIS. Of those 342 comments, 12 were oral statements received at the three public hearings held on the draft EIS and 330 were written comments. In general, 36 comments supported all-wilderness, 7 supported no-wilderness and 294 supported partial-wilderness recommended by BLM. Six comments supported more wilderness than was addressed in the draft EIS.

Those favoring wilderness cited the area's natural character, opportunities for primitive recreation (mainly hiking and sightseeing with particular emphasis on Willow Creek Canyon's archeological values and fishing opportunities) and good opportunities for solitude. Inclusion of the area in the National Wilderness Preservation System as a representative of volcanic land forms in the transition zone between wooded mountains and desert shrub ecosystems was also cited.

Those opposed to wilderness cited the elimination of possible mineral development in designated wilderness as a general reason without reference to specific mineral values within the WSA. General concerns were expressed that wilderness would restrict the use of motorized vehicles to livestock facility maintenance, but no specific issues were raised about facilities within Tunnison Mountain WSA.

State and local agency and elected officials responses to the proposed action/partial-wilderness alternative where 39% of the WSA would be designated as wilderness, varied widely. California Department of Fish and Game supported the proposed action as did Nevada County (California) Supervisor Joel Gustavson. The Lassen County Board of Supervisors supported no-wilderness.

Letters were received from one State agency and five Federal agencies that took no positions as to a recommendation on alternatives or acreage to be preserved as wilderness. They were the California Dept. of Water Resources, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey and the Environmental Protection Agency.

APPENDIX 1
ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION
TUNNISON MOUNTAIN WSA (CA-020-311)

PARCEL No.	LEGAL DESCRIPTION TWNSHP	RNG	SEC	MERIDIAN	TOTAL ACREAGE	NUMBER OF OWNERS	TYPE OF OWNERSHIP BY ESTATE SURFACE ESTATE	SUBSURFACE ESTATE	PRESENTLY PROPOSED FOR ACQUISITION	PREFERRED METHOD OF ACQUISITION	ESTIMATED COST OF ACQUISITION LAND COSTS ($1000)	PROCESSING COSTS ($1000)
1	31N.	13E.	32	MDM	40	1	PRIVATE	PRIVATE	YES	PURCHASE	6.0	2.5
2	31N.	13E.	33	MDM	40	1	PRIVATE	PRIVATE	YES	PURCHASE	6.0	2.5

These figures were derived from Bureau Land Records and provide for more detail than GIS estimates and therefore may differ from acreage summaries in Table 1.

Five Springs

CA-020-609

FIVE SPRINGS WILDERNESS STUDY AREA (WSA)

(CA-020-609)

1. THE STUDY AREA --- 50,401 acres

The Five Springs WSA is located primarily in Lassen County, California (97%), with a small portion, (3%), in Washoe County, Nevada. The WSA contains 49,206 acres of BLM land and 1,195 acres of private land located in 8 parcels ranging in size from 40 to 640 acres. Surface owners own all subsurface mineral rights beneath their holdings. Cities nearest to the WSA are Susanville, California, (30 miles southwest), and Reno, Nevada (75 miles south of the WSA) (see Map 1 and Table 1).

The WSA is bounded primarily by dirt roads. A major portion of the southeastern boundary is delineated by a service road for an underground telephone cable, and the Smoke Creek Ranch Road marks the balance of the southern boundary. An access road along the base of Five Springs Mountain constitutes the southwestern boundary. The Shinn Ranch to Stony Creek Road constitutes the northwestern boundary. The northern boundary is at the base of Rush Creek Mountain on an existing road, and the northeastern boundary is a road that travels along the base of Cherry Mountain, roughly parallel to Smoke Creek. Privately-owned lands mark the eastern boundary, which roughly follows a rocky escarpment with a irrigated meadow at the base. The extreme southeastern tip lies in Nevada.

The WSA is located on the western edge of the arid Great Basin characterized by eroded volcanic mountains. Five Springs Mountain, Cherry Mountain and Rush Creek Mountain are low, rolling mountains without prominent peaks located within the unit. Stony and Rush Creeks are mostly perennial creeks originating within the unit. Riparian vegetation is dense in parts of Rush Creek and slight to moderately dense in Stony Creek. Other than willows in the two creek bottoms and at springs, vegetation throughout the WSA is limited to sagebrush and associated shrubs and grasses. Elevations range from 4,500 feet to 6,300 feet. Numerous broad, open canyons are cut into the three prominent ridges that make up the core of the relief in the WSA.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Three different alternatives were analyzed in the Draft and Final Eagle Lake-Cedarville EIS: no wilderness, partial wilderness, where 50% of the WSA would be designated wilderness and the remainder managed for multiple use, and all wilderness.

2. RECOMMENDATION RATIONALE

0	acres recommended for wilderness
49,206	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness.

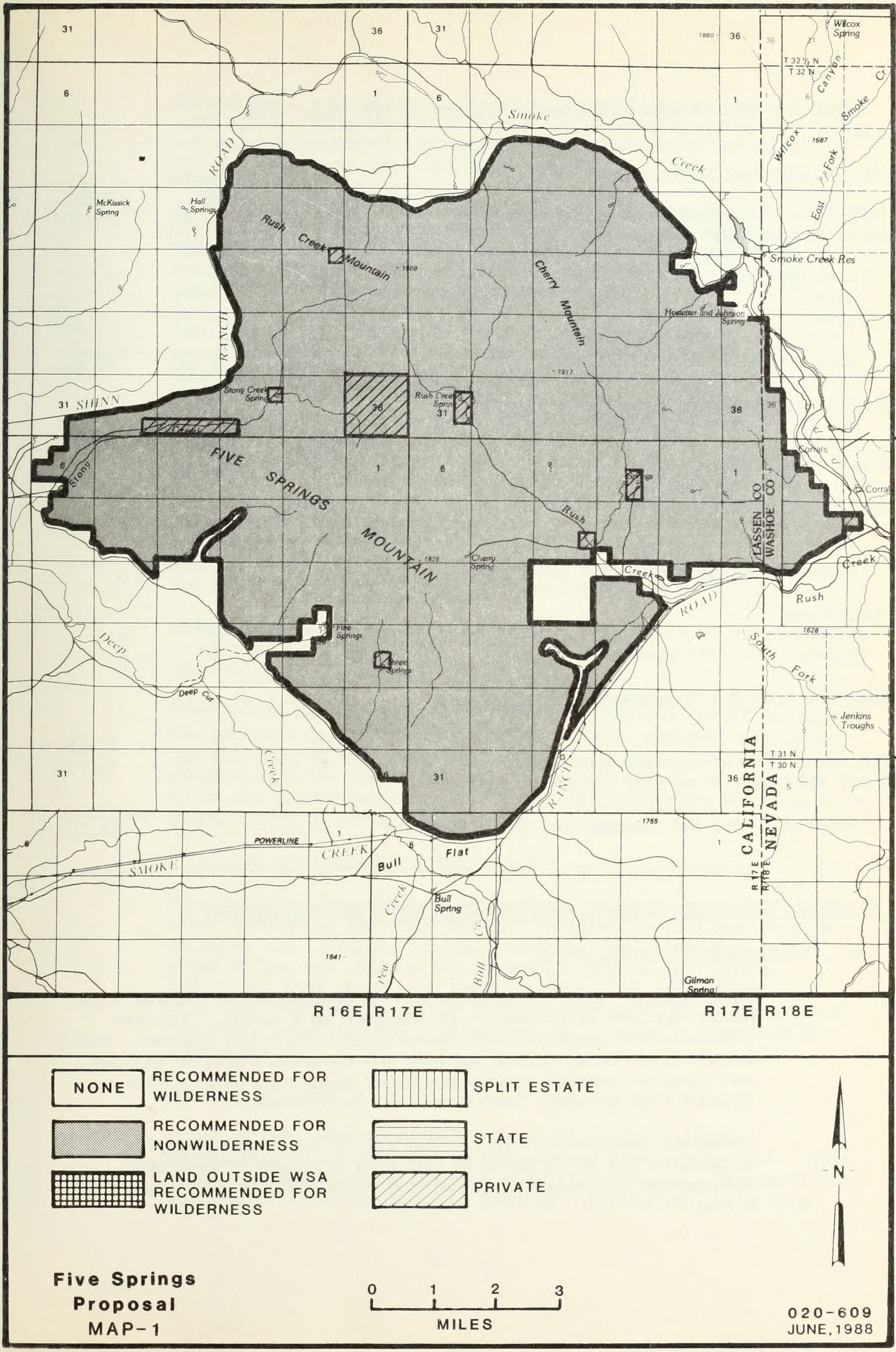
Within California 47,823 acres (97% of the WSA) are recommended nonsuitable. Within Nevada 1,383 acres (3% of the WSA) are recommended nonsuitable.

The all-wilderness alternative is the environmentally-preferred alternative because it would result in the least change from the existing natural environment. The selected alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The main reason the Five Springs WSA is recommended nonsuitable is because its wilderness qualities, while present, do not distinguish the WSA from much of the surrounding area. Rather, the WSA is typical of rock-strewn, low, mountainous sagebrush grassland found throughout the Great Basin/Modoc Plateau region and is not a unique representative of this area. The WSA is best characterized as common and uninteresting without any particularly interesting or unique features that would make it a good addition to the National Wilderness Preservation System. Another reason for not designating this WSA is that it would remain open and available for regionally important motorized recreational hunting. It would also allow it to remain available as a utility corridor for future powerlines.

The Five Springs WSA is a very popular chukar hunting area in Lassen County. It is one of the best areas in California for chukar hunting, providing an estimated 5,700 hunter days annually during the hunting season from October to the end of November. There are approximately 15 miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use. Cross-country vehicle travel is also common as hunters seek to avoid lengthy approach walks. Wilderness designation of much of the WSA would eliminate the vehicle accessibility afforded by the WSA's many ways and open slopes and preclude much of this popular public use of the WSA.

Approximately nine miles along the WSA's southern side have been identified by the utility industry as needed for a high priority potential utility corridor. This area is one of the last remaining areas that can provide an east-west utility corridor through Northern California. No construction is planned at this time, but the alignment is considered necessary for development of future power corridors. This potential non-wilderness use of the WSA's southern side was also deemed a more important use of the area than wilderness designation.



Five Springs Proposal
MAP-1

020-609
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area			Acres	
		CA	NV	TOTAL
BLM	(surface and subsurface)	47,823	1,383	49,206
Split Estate	(BLM surface only)	0	0	0
Inholdings				
State		0	0	0
Private		1,195	0	1,195
Total		49,018	1,383	50,401

Within the Recommended Wilderness Boundary			Acres	
		CA	NV	TOTAL
BLM	(within WSA)	0	0	0
BLM	(outside WSA)	0	0	0
Split Estate	(within WSA)	0	0	0
Split Estate	(outside WSA)	0	0	0
Total BLM Land Recommended for Wilderness		0	0	0
Inholdings				
State		0	0	0
Private		0	0	0

Within the Area Not Recommended for Wilderness			Acres	
		CA	NV	TOTAL
BLM	(surface and subsurface)	47,823	1,383	49,206
Split Estate	(BLM surface only)	0	0	0
Total BLM Land Not Recommended for Wilderness		48,823	1,383	49,206

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Five Springs WSA is predominantly natural with human imprints unnoticeable in the area as a whole. Dominant vegetation is sagebrush with associated shrubs and grasses. Small meadow areas occur around springs and riparian areas of willows and other streamside vegetation occur along portions of two intermittent streams, Rush Creek and Stony Creek.

   Unnatural features within the WSA are livestock management facilities (14 stock ponds of one acre or less), 9 developed springs and 7.5 miles of fence) and motor vehicle access ways (15 miles).

All of the livestock facilities are low profile and are not noticeable beyond one-third mile of each facility. The very rocky surface of the WSA limits extensive development of new ways. Overall effect on naturalness is slight.

2. Solitude: The WSA's varied terrain and size provide opportunities for solitude. Three ridge-like mountains and two primary drainages five to six miles long, as well as numerous short drainages of one to four miles, provide sufficient variation in terrain to isolate visitors one from another.

From mid-October through the end of December, however, solitude within the WSA is disrupted. The Five Springs WSA is one of the most popular game bird hunting areas in Lassen County. During late October and through November and December approximately 5,700 hunter days occur in the WSA. Hunters drive virtually all of the access ways within the WSA and in some areas drive cross-country in search of good hunting areas. Heaviest vehicle activity occurs on ways that access the rocky slopes along the WSA's southwest and southeast sides. Traffic along the WSA's southeast boundary road, Smoke Creek Ranch Road, exceeds 100 vehicles per day on weekends then drops to lower levels mid-week. Opportunities for solitude decline as hunting activity increases. Following hunting season the WSA again has good opportunities for solitude.

Adjacent lands are either undeveloped public land or agricultural lands used for farming and livestock. Outside activities do not adversely affect solitude within the WSA.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation

Opportunities for primitive and unconfined types of recreation exist throughout the WSA; however, distinctive destination type features are lacking. Isolated springs, small riparian areas, broad ridges and canyons are common throughout the region. Activities that occur with very low frequency are hiking, wildlife observation, nature study and archeological sightseeing. Available water is very limited and would require treatment for human use.

4. Special Features

There is one known population of the plant *Scutellaria holmgreniorum*, on 20 acres on the western side of the unit. This plant is identified by BLM as a sensitive species. BLM sensitive species are usually plants of limited distribution where more information is needed to determine their eventual status. The 20 acres are part of a 2,000-acre habitat area, most of which is outside the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 49,206 acres of the Intermountain Sagebrush/Sagebrush Steppe ecosystem. Wilderness designation of this WSA would not add a new ecosystem or landform to the NWPS. The WSA is in the sagebrush-steppe ecosystem. There are two existing wilderness areas, Jarbidge, Nevada, and South Warner, California, representing this ecotype.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
Intermountain Sagebrush/ Sagebrush Steppe	3	76,699	136	4,321,133
	CALIFORNIA			
Intermountain Sagebrush/ Sagebrush Steppe	1	31,295	4	103,224
	NEVADA			
Intermountain Sagebrush/ Sagebrush Steppe	1	32,407	29	1,273,919

2. Expanding the opportunity for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The Five Springs WSA is within a five-hour drive of five major population centers. Table 3 summarizes the number and acreage of designated wilderness areas and other BLM wilderness study areas within a five-hour drive of these population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Chico	16	1,286,873	13	430,822
Redding	14	1,236,503	11	344,633
Sacramento	46	5,001,817	87	2,479,541
Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809

3. Balancing the geographic distribution of wilderness areas: Within a 50 air mile radius of the Five Springs WSA are six BLM WSA's recommended for wilderness designation. The South Warner Wilderness, administered by the Modoc National Forest and located 45 miles north of the Five Springs WSA, is the only designated wilderness within 50 air miles of the Five Springs WSA.

C. Manageability

The entire WSA is manageable as wilderness. During fall hunting season, management would be difficult due to open terrain around the WSA's lower slopes adjacent to most boundary roads which are readily accessible to four-wheel drives. Numerous broad, gradually sloping canyons contain 15 miles of access ways that would be difficult to impossible to effectively close to motorized entry. Additionally, four cherrystemmed roads total six miles inside the WSA. It would be very difficult to prevent cross-country travel, easily accessed by four miles of these cherrystemmed roads, because the adjacent portions of the WSA are also broad and open. More intensive management would be required. Continuous field presence would be necessary to prevent hunters from using these routes to popular hunting areas within the WSA and from heading off cross-country from boundary roads.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitable recommendation: The geology and mineralization of the Five Springs WSA is described in the Unit Resource Analysis (URA) which was based on data in the Mineral Resource Inventory (MRI) file (1979-1980) for the BLM Cal-Neva Planning Unit. The URA was updated in August of 1980. BLM MRI data in the Affected Environment section of the Eagle Lake-Cedarville EIS prepared in 1987 indicated that the WSA has no history or visible evidence of

activities with respect to locatable minerals, no known development of salable minerals in the WSA and the potential for oil and gas is unknown. There had been three previous leases covering 9,225 acres of the WSA which were dropped prior to May 20, 1987. The WSA is not considered valuable for geothermal or sodium. Mineral data for this WSA is very sparse.

2. Summary of significant new mineral resource data collected since the suitability recommendation which should be considered in the final decision:

No U.S. Geological Survey or U.S. Bureau of Mines mineral surveys were conducted in this WSA.

No new information on the geology or mineralization of this WSA has been received from other agencies or the public since the Final EIS was published.

According to BLM mineral records dated March 25, 1988, no mining claims or mineral leases/sales exist within the Five Springs WSA. Because the mineral potential for this WSA is considered to be very low, no mineral potential map was prepared.

E. Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all alternatives considered including designation or non-designation of the entire area as wilderness.

TABLE 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Wilderness Values	Values of naturalness, solitude & primitive recreation would be reduced on up to 8,000 acres if 9 miles of powerline are built in the proposed utility corridor in the nonwilderness area. The perception of naturalness would be reduced on 415 acres to proposed range improvements. Wilderness values would be slightly reduced on 40,460 acres due to continual CHV use.	Solitude would be slightly enhanced over present levels by closing 15 miles of way and eliminating 5,700 visitor-days of CHV use. There would be some continued vehicle travel for range management. There would also be illegal CHV use on the perimeter of the area as no natural barriers exist. The perception of naturalness would be reduced on 415 acres due to range improvements.	Naturalness, solitude & primitive recreation would remain as they exist on the 25,174 acres designated wilderness. These values would be lost on up to 8,000 acres in the non-wilderness portion if 9 miles of powerline are built in the proposed utility corridor. Perception of naturalness would be reduced on 415 acres due to range improvements. Solitude would continue to be disturbed by 5,700 visitor-days of CHV use on 15 miles of ways.
Recreational CHV Use	No impact, as current recreational CHV use of 5,600 visitor-days would continue.	Recreational CHV use of 5,600 visitor-days associated with chukar hunting would be foregone annually. Impacts of shifting this use to other public lands would be slight. Heavy chukar hunting use would decline due to the closure of 15 miles of ways.	No significant impact. The non-suitable area contains the existing 15 miles of ways that support the 5,600 visistor days of recreational vehicle use.
Trans Sierra Utility Corridor	No impact. The 9-mile utility corridor would be available for future construction of high voltage powerlines.	There could be no powerline built in the 9-mile utility corridor. Any future powerline would have to be built in a more expensive location outside the WSA.	No impact. The 9-mile utility corridor would be available for future construction of a high voltage powerline.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Endangered Species	The potential for impacts on Scrutellaria holmgreniorum would not be significant due to the small number of surface disturbing possibilities and the mitigating measures available at each location. No activities are planned in the area where the plant is found.	No impact on endangered species. The one small stock pond proposed is located away from known population of Scrutellaria holmgreniorum.	The potential for impacts on Scrutellaria holmgreniorum would not be significant due to the small number of possible surface disturbing activities and the mitigating measures available at each location. No activities are planned in area where plant is found.

F. Local Social and Economic Considerations

No significant local social or economic considerations were identified in the draft and final Eagle Lake-Cedarville Wilderness EIS's. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the inventory process and early stages of EIS preparation were used to develop significant study issues and alternatives for wilderness management.

A technical review team (TRT) was also used to help identify issues and formulate the alternatives analyzed in the EIS. It was used as a tool to lessen the chances of polarization between interest groups and to provide the Bureau with high quality public input representative of the positions of key groups interested in or affected by wilderness designations. Input provided by the TRT was used in developing the wilderness recommendations for this WSA.

For the Eagle Lake-Cedarville Wilderness EIS that included the Five Springs WSA, the Susanville District Advisory Council identified the following interested groups and resources to be represented on an eight-member TRT: livestock-adjacent land owners; wildlife-agencies-sportsmen-wilderness-environmental-dispersed recreation; minerals-energy-utilities, wild horses; motorized recreation, cultural-historical-archeological; Bureau of Land Management. The representatives were very knowledgeable and highly respected members of their interest groups. The TRT members toured the WSA, held lengthy discussions spanning many weeks and eventually reached unanimous agreement that a no-wilderness recommendation was appropriate for the Five Springs WSA. The team's recommendation of non-suitable was supported by the Susanville District Advisory Council and by BLM, and is the recommended action for this WSA.

Key issues raised through public involvement and analyzed by the TRT and in the EIS were: a wilderness complex where five adjacent WSAs, separated only by boundary roads (including Five Springs WSA), would be managed as a wilderness complex inclusive of the road (this was analyzed in the all-wilderness alternative of the EIS); the quality of the wilderness resource and how much was appropriate to be preserved and managed as wilderness; concern that wilderness would prevent potential mineral development, livestock management activities and motorized recreation access for hunting; concern that wilderness would limit management of wild horses and burro populations; and concern that wilderness would preclude development of potential high-voltage electric transmission lines through the region. All of these issues were addressed in each of the three alternatives analyzed in the EIS: all wilderness, partial wilderness (50% suitable, 50% non-suitable) and no wilderness. During formal public reviews of the draft EIS, a total of 306 comments were received that addressed this WSA specifically or as part of general comments on all WSA's in the draft EIS. Of the 306 comments received, 11 were oral comments received at public hearings held in Cedarville and Susanville, California and in Reno, Nevada. The remaining 295 comments received were written. In general, 32 respondents supported all wilderness, 263 supported no wilderness (recommended by BLM) and 1 supported partial wilderness. Ten respondents supported more wilderness than was addressed in the draft EIS.

Those favoring wilderness cited the area's natural character, opportunities for primitive recreation (mainly hiking and sightseeing), opportunities for solitude and archeological values within the WSA. Inclusion of the area in the NWPS as a representative of volcanic landforms in the desert shrub ecosystem was also cited.

Those opposed to wilderness cited concern that despite livestock's grandfathered provisions in the Wilderness Act, livestock management activities (particularly motorized access for water facility inspection and maintenance and sheep camp movement) would be restricted. Restrictions or prohibition on development of new water facilities, springs and reservoirs, was also cited as reasons for opposition to wilderness. Others opposed to wilderness cited the elimination of possible mineral development in designated wilderness as a general reason without reference to specific mineral values within the WSA.

All of the following local and state agencies supported the BLM no-wilderness alternative:

> Lassen County (California) Board of Supervisors; Nevada County (California) Supervisor Joel Gustafson; The State of Nevada through the Nevada Clearinghouse; The Nevada Division of State

Parks; The Nevada Department of Minerals; and The California Department of Fish and Game. Washoe County, Nevada did not submit comments.

Letters were received from two State agencies and five Federal agencies that took no position as to a recommendation on alternatives, issues, or acreage to be preserved as wilderness. They were from the California Department of Water Resources, Nevada Division of Historic Preservation, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, and the Environmental Protection Agency.

Skedaddle

CA-020-612

SKEDADDLE WILDERNESS STUDY AREA (WSA)

(CA-020-612)

1. THE STUDY AREA --- 63,189 acres

The Skedaddle WSA is located in Lassen County, California (99.59%) and in Washoe County, Nevada (0.5%). The WSA contains 62,010 acres of BLM land and 1,179 acres of private land located in seven parcels varying in size from 40 to 640 acres (see Map 1 and Table 1). Cities nearest the WSA are Susanville, California, 30 miles west and Reno, Nevada, 70 miles south.

The unit is bounded on the west by the Bruebeck Springs Road, private land, and County Road 320. On the south, the boundary follows section lines to avoid toe slopes determined to be unnatural during the inventory due to numerous roads and gravel pits. In this area the boundary follows the section line extending east-west, south of T. 28 N., R. 16 E., sections 1,2,3,4 and T. 28 N., R. 17 E., section 6. Continuing eastward, the southern boundary extends north 1-1/2 miles and east 2 miles around the boundary of the Sierra Army Depot's demolition site withdrawal. On the east, the boundary follows the Spencer Creek and Skedaddle Roads and private land. On the north, the boundary follows Humboldt Wagon Road and private land.

The WSA is located on the northwestern edge of the arid Great Basin, characterized by eroded volcanic mountains and expansive desert valleys (the remains of ancient lake beds). The WSA comprises an area approximately 10 miles by 12 miles. The Skedaddle and Amedee Mountains located within the central and southern parts of the WSA are its dominant physical features. These peaks rise from adjacent dry lake beds and low sloping hills from elevations of 4,200 feet to the 7680-foot summit of Skedaddle Mountain.

The core area of the WSA is dominated by rugged vertical cliffs, canyons, peaks, and upland basins of the Skedaddle and Amedee Mountains. The higher Skedaddle elevations support scattered aspen groves and patches of large berry shrubs. The deep canyons support riparian vegetation (willows, wild rose, berry shrubs) and the upland basins, small grass meadows. The northern and eastern edges of the WSA are open, sagebrush-covered flats that develop into long, toe slopes of the Skedaddle Mountains. On the south and west, shorter and steeper toe slopes lead into Amedee Mountain. Sagebrush and bunch grass vegetation dominate the majority of the WSA.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Four (4) different alternatives were analyzed in the Eagle Lake-Cedarville Final Wilderness EIS: partial wilderness, the proposed action, where 60% of the WSA would be designated wilderness, partial wilderness where (39%) of the WSA would be designated wilderness, all wilderness and no wilderness.

2. RECOMMENDATION RATIONALE ---

37,644	acres recommended for wilderness
24,366	BLM acres recommended for non-wilderness

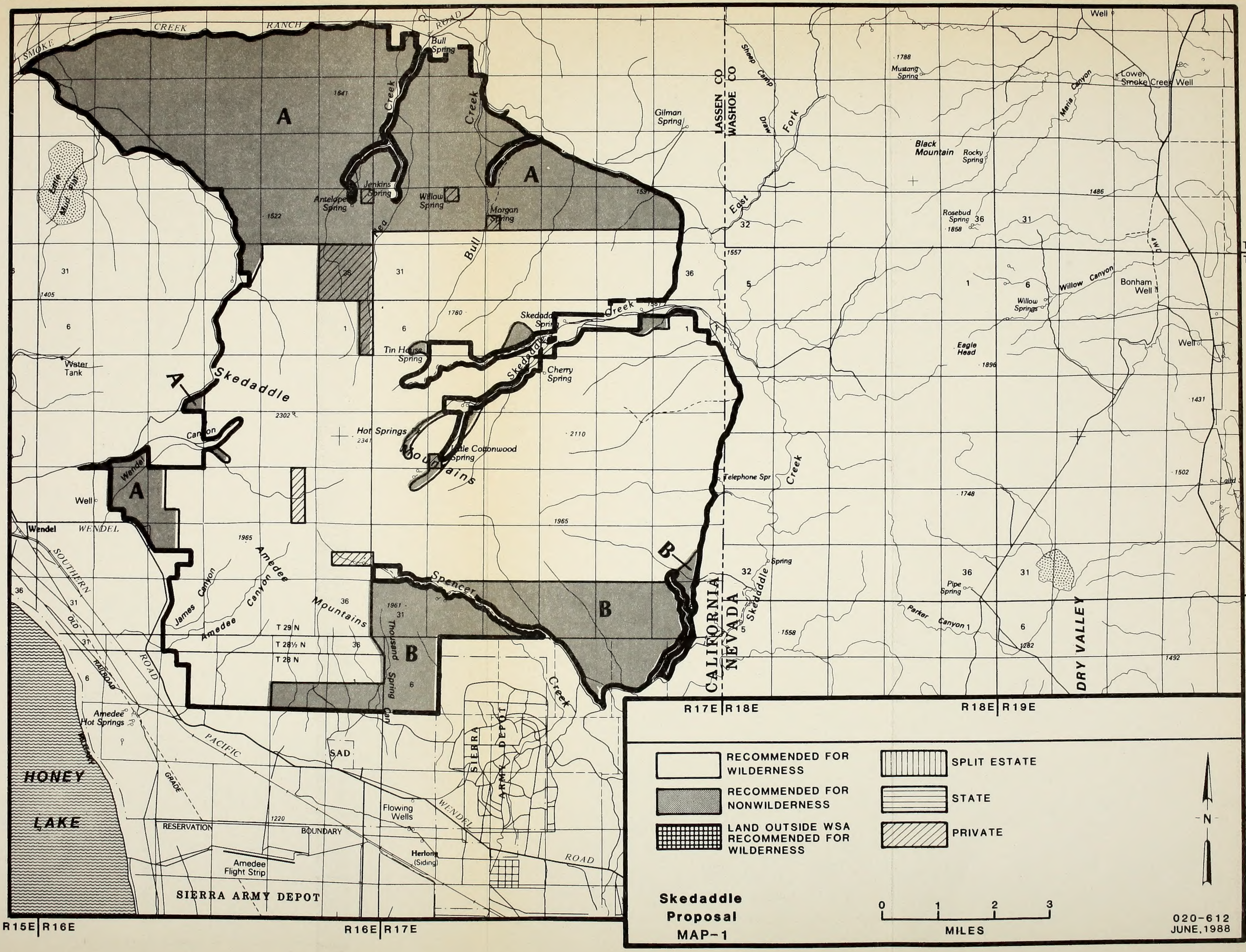
Sixty percent partial wilderness is the recommendation for this WSA. 24,366 acres in this WSA are released for uses other than wilderness. The suitable recommendation is conditional, on a qualifying statement being embodied in the enabling legislation, that wilderness designation would not impair the present or future mission of the Sierra Army Depot, which is vital to national security and local economic stability.

Within California 37,339 acres are recommended suitable and 24,366 acres are recommended non-suitable. Within Nevada 589 acres are recommended suitable.

The all-wilderness alternative is the environmentally preferred alternative because it would result in the least change from the existing natural environment over time. The selected alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The 60% partial-wilderness recommendation for the Skedaddle Mountain WSA is based on the following rationale: (1) the lands proposed for wilderness possess very high quality wilderness values, while on lands not recommended for wilderness, these values are lower or resource conflicts occur, (2) the proposed wilderness can be managed to preserve wilderness qualities and (3) wilderness designation will not have a significant impact on land use occurring adjacent to the proposed wilderness, such as the Sierra Army Depot operations.

The area of the Skedaddle Mountain WSA recommended for wilderness contains outstanding wilderness qualities. The area is a rugged, mountainous landform dissected by many steep, rocky canyons, cliffs and ridges. Opportunities for solitude are plentiful throughout the large topographically-diverse area. The area offers excellent opportunities for challenging primitive recreation in a rugged, natural setting. Hiking, backpacking, and wildlife observation, particularly opportunities for viewing birds of prey, are excellent. Many riparian areas, springs, and aspen groves add to the natural appeal of the recommended wilderness area. Outstanding scenic vistas are common from high points on the Skedaddle and Amedee ridgecrests. Because of the unique geographic location of Skedaddle Mountains, views of three major geologic provinces, the Cascades, the Great Basin and the Sierra Nevada, can be enjoyed from within the recommended wilderness area. The vistas of the undisturbed natural areas within the recommended wilderness and the vast expanse of geologically diverse landforms beyond the WSA heighten the experience of isolation inherent in wilderness.



Skedaddle Proposal
MAP-1

020-612
JUNE, 1988

The area recommended for wilderness can be effectively managed to preserve wilderness qualities. Cliffs and steep, rocky terrain limit vehicle entry along the western and southern sides of the recommended wilderness. On the eastern and northern portions of the recommended wilderness, provision for vehicle access on two canyon-bottom cherrystemmed roads will provide for continued vehicle access to popular hunting areas within the Spencer and Skedaddle Creek drainages. Continued vehicle access into these areas should reduce the potential for vehicle entry into the wilderness areas along the more open slopes adjacent to the eastern boundary. Management to preserve wilderness would not be affected by two parcels of private land located within the core of the recommended wilderness area. One 120-acre parcel contains a small stock pond and is used for stock watering. Continued stock watering will not affect management of the area as wilderness. The parcel is accessible via a cherrystemed road that accesses an adjacent property owned by the same landowner. The second parcel, 160 acres, is undeveloped and is located in Little Spencer Basin within the core of the recommended wilderness. Steep slopes and difficult access over a very rocky cherrystemmed road and across 1-1/2 miles of grass and brush-covered slopes within the recommended wilderness, limit development potential of this parcel. It is unlikely that this parcel would be developed and therefore, it is not expected that future use of this private parcel would cause adverse impacts to wilderness. Five other private parcels are located at the end of cherrystemmed roads that extend into the recommended wilderness area. These parcels are used for livestock watering and contain small stock ponds and developed springs. Continued use of these parcels for livestock watering and seasonal hunter camps is not expected to affect the preservation of wilderness qualities on adjacent lands recommended for wilderness and acquisition is not recommended.

Preservation of wilderness qualities within the recommended wilderness area would not be affected by mineral or geothermal resource development. Mineral values within the recommended wilderness area while present (seven perlite claims) are considered subeconomic and are not expected to be developed. Geothermal resource development is not expected on 830 acres of the Wendel Known Geothermal Resource Area (KGRA) located within the recommended wilderness area because of low potential and high development costs related to very rough terrain. Alternate sites are available within the KGRA outside the recommended wilderness area where the geothermal resource is considered to have a higher potential and site development costs would be substantially less because of more favorable terrain.

Wilderness values are affected by operations at the Sierra Army Depot ammunition demolition facility located on military withdrawal land adjacent to the wilderness study area's south side. Ammunition detonations cause brief loud disturbances to solitude within the recommended wilderness area. While these activities disturb solitude within the WSA, the infrequent and brief impact of these activities do not affect solitude or other wilderness qualities to such an extent to warrant non-wilderness designation of an otherwise highly qualified area. This wilderness recommendation is based on the recognition that while the outside influences of the Sierra Army Depot's activities may vary widely with associated affects on solitude within the recommended wilderness, these impacts are temporary and transient.

Outstanding opportunities for rugged, challenging primitive recreation, high wildlife values that enhance wilderness experiences, natural characteristics throughout the heart of the WSA and, for the large majority of time, excellent opportunities for solitude all lead to the conclusion that this area qualifies for wilderness designation.

The BLM recognizes the Sierra Army Depot activities as legitimate uses of nearby land and recommends to local, State, and Federal authorities that there be no impairment of Depot activities because of wilderness designation. BLM recommends that Congress review the situation concerning the proximity of Sierra Army Depot prior to drafting the legislation, and make findings that would allow the continuing and potential expansion of operations on the Sierra Army Depot. If designated as wilderness, the Sierra Army Depot would be directly involved in the development of a wilderness management plan for the Skedaddle Mountains.

This wilderness recommendation carries with it a non-wilderness recommendation for a one mile wide area that surrounds the Depot's military withdrawal land. This area coincides with Lassen County's public safety zone designation around the depot demolition facility land. This area, combined with one to two miles of military withdrawal land located between the withdrawal boundary and the actual demolition grounds, provides a zone two to three miles wide between the recommended wilderness area and the demolition site. Topographic relief provides physical, visual and audible screening of most of the recommended wilderness area from the demolition site.

Past regular BLM use (hunting, and hiking) on public lands adjacent to the demolition facility have not resulted in any reported problems by area visitors, nor has such use generated requests by depot management to extend the safety zones.

Hunting for deer and chukar are popular uses of the recommended wilderness area and these activities can continue under wilderness designation. The recommended wilderness area boundaries were developed to insure that all existing major vehicle access routes into the Skedaddle WSA remain open to motorized vehicle use with the expressed purpose of providing access to popular hunting areas. Cherrystemmed roads extend up Spencer and Skedaddle Creek and into Wendel Canyon. Access to other popular hunting areas is possible from boundary roads and on 39 miles of vehicle ways that will remain open in the non-wilderness area. Eight miles of vehicle access ways would be closed to protect wilderness values of naturalness and solitude in the recommended wilderness area.

Areas not recommended for wilderness have lower wilderness values characterized by common uninteresting landscapes, management difficulties and resource conflicts. Area A, located north and west of the Skedaddle Mountains, which is not recommended for wilderness, has generally broad and flat to gradually sloping terrain. While opportunities for solitude and primitive recreation are present in these areas, the areas lack the topographic variety, scenic interest and high wildlife values that contribute to the higher quality wilderness experiences present within recommended wilderness area. The non-wilderness areas offer limited appeal for hiking, backpacking, sightseeing and camping. Resource conflicts in the non-wilderness area north of Skedaddle Mountain are with motorized use associated with hunting access and the need for a future utility corridor along an existing underground telephone line that parallels the WSA's northern boundary. Motorized use of this area for hunting access to lands within the core of the WSA is the main public use of the area. Wilderness designation would prevent access through this area and significantly reduce hunting use of the core areas of the WSA.

Approximately eight miles along the WSA's northern side have been identified by the utility industry as needed for a high priority potential utility corridor. This area is one of the last remaining areas that can provide an east-west utility corridor through Northern California. No construction is planned at this time, but the alignment is considered necessary for development of future power corridors. This potential non-wilderness use of the WSA's northern side was also deemed a more important use of the area than wilderness designation of an area of nondescript wilderness qualities.

Area B located south and east of Amedee Mountain which is recommended non-wilderness coincides with a one-mile public safety zone surrounding the Sierra Army Depot's military withdrawal where ammunition detonation occurs. Non-wilderness is recommended in support of the intent of this designation. The area on the southeastern corner of the WSA adjacent to the public safety zone is recommended non-wilderness because it is located downwind of the Sierra Army Depot demolition site. Prevailing westerly winds carry dissipating smoke and dust clouds over this area.

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres		
		CA	NV	TOTAL
BLM	(surface and subsurface)	61,422	589	62,010
Split Estate	(BLM surface only)	0	0	0
Inholdings				
State		0	0	0
Private		1,179	0	1,179
Total		62,601	589	63,189

Within the Recommended Wilderness Boundary		Acres		
		CA	NV	TOTAL
BLM	(within WSA)	37,055	589	37,644
BLM	(outside WSA)	0	0	0
Split Estate	(within WSA)	0	0	0
Split Estate	(outside WSA)	0	0	0
Total BLM Land Recommended for Wilderness		37,055	589	37,644
Inholdings[1]				
State		0	0	0
Private		283	0	283

Within the Area Not Recommended for Wilderness		Acres		
		CA	NV	TOTAL
BLM	(surface and subsurface)	24,366	0	24,366
Split Estate	(BLM surface only)	0	0	0
Total BLM Land Not Recommended for Wilderness		24,366	0	24,366

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[1] Appendix 1 is a detailed description of inholdings and split estate tracts included within the study. For purposes of this report, split estate lands are defined only as those lands with Federal surface and non Federal subsurface (minerals). Lands that have Federal minerals but non Federal surface should be classified in this report by the owner of the surface estate.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS:

A. Wilderness Characteristics

1. Naturalness:

The Skedaddle WSA appears natural throughout. In the area recommended for wilderness designation, rugged cliffs, steep slopes, numerous ridges and canyons of the Amedee and Skedaddle Mountains bear the weathered imprint of natural change unaffected by man. Native grass, shrub and riparian species contribute to the natural appearance of this area. Scattered, small aspen groves on the northern slope of Skedaddle Mountain further add to the natural appeal of the area. The area not recommended for wilderness, although not as rugged topographically, is also natural in appearance and is populated by native grass and shrub species.

Unnatural man-made features do occur within both the area recommended for wilderness and the area not recommended for wilderness. Within the area recommended for wilderness designation, man-made features consist of 8 developed springs, 16 small (1 acre or less) stock ponds, 1.5 miles of four-strand wire fence, and 8 miles of access ways. The stock ponds are located in drainages along the northern and eastern slopes of the area recommended for wilderness. Most developed springs are located in the Skedaddle and Spencer Creek drainages. Three wildlife guzzlers (water catchments), 10' X 20', are also located within the recommended suitable area.

These man-made facilities are small, low profile developments that have little impact on the appearance of naturalness in the adjacent areas and in the WSA as a whole. Stock ponds are located in the bottom of drainages and are visually screened by adjacent ridges and nearby slopes. Natural revegetation of stock pond dams limits the visibility of most of these structures to small areas immediately around facilities. Fences blend into the surrounding landscape because they are visually small objects that are hard to distinguish in the surrounding mosaic of brush, grasses and rock. Access ways are little more than two-wheel tracks through the brush and are generally located in the bottom of drainages where brush and adjacent ridges effectively shield them from all but immediate view.

In the area not recommended for wilderness designation, there are 7 developed springs, 15 small (one acre or less) stock ponds, 4.5 miles of wire fence and 39 miles of access ways. As in the area recommended for wilderness, these man-made features blend into the landscape and do not affect the appearance of naturalness beyond the immediate area surrounding each facility. Naturalness was not a significant factor in deleting the portion of the WSA not recommended for wilderness.

Detonation and burning of ammunition and other materials at the Sierra Army Depot's demolition facility on the southern flank of the Amedee Mountains two miles south of the WSA, causes smoke clouds that occasionally drift over the WSA and affect naturalness. The extent of the impact depend upon the wind direction, type of ammunition detonated, and frequency of detonation (usually single to multiple detonations within a one-hour period in mid-afternoon). Prevailing westerly winds usually carry the majority of cloud drift east of the WSA, but drift of dissipating clouds over the WSA does occur.

2. Solitude

The area of Skedaddle WSA recommended for wilderness designation offers excellent opportunities for experiencing solitude. Numerous rugged canyons, ridges and mountain-rimmed upland basins provide ample opportunities for isolation. Within Amedee, James, Skedaddle and Spencer Creek Canyons, Big and Little Spencer Basins, as well as within the many unnamed canyons that comprise the balance of the recommended wilderness area, rugged topography provides both visual and audial screening, shielding visitors one from another as well as from the influences of activities outside the WSA. Area A, within the area not recommended for wilderness (see Map 1), is characterized by level to gently sloping terrain. This area has little topographic variation to provide visual screening and isolation of visitors. While opportunities for experiencing solitude in this area west and north of the area recommended for wilderness are present, the opportunities are not as good as within the area recommended for wilderness.

Within Area B, also not recommended for wilderness, there are excellent opportunities for solitude, except during brief periods when detonations from Sierra Army Depot's ammunition demolition facility temporarily disturb solitude with loud explosive blasts. These vary from single to multiple explosions usually occurring within a one-hour period in mid-afternoon. Frequency of detonations varies with Sierra Army Depot's workload and weather conditions. Detonations do not always occur on a daily basis. This area is topographically diverse, and as with adjacent areas recommended for wilderness, offers excellent opportunities for solitude. Disturbance to solitude by demolition activities was not the principal reason for deletion of this area from the recommended wilderness.

Throughout most of the year, human activities have little impact on solitude within the WSA. Livestock operators travel on existing roads and ways and occasional visits from hikers and horseback riders are seasonal and infrequent. During fall hunting season, however, solitude is temporarily disturbed by hunter activity. An estimated 4200 visitor-days of hunter use occur within the WSA, mainly from mid-October through mid-November during deer season and the first 4 weeks of Chukar season.

Solitude is disturbed by hunter vehicle use on 18 miles of cherrystemmed roads that extend within the WSA and on 47 miles of access ways that also are within the WSA. However, most of this solitude disturbing activity occurs on 10 miles of cherrystemmed roads and 39 miles of access ways located outside the area recommended for wilderness. Within the area recommended for wilderness, hunter vehicle use is concentrated within narrow canyons (where popular access roads have been cherrystemmed out of the recommended wilderness) or on peripheral boundary roads. Vehicle noise is confined within the canyons where the cherrystemmed roads are located or is limited to the outer periphery of the recommended wilderness where vehicle noise has little affect on solitude.

Other impacts to solitude within the recommended wilderness area from outside activities result from periodic military helicopter security flights around the depot demolition facility adjacent to the WSA's south side and from jet aircraft take-off and landing at the Sierra Army Depot airstrip 2-1/2 miles south of the WSA. Helicopter flights are intermittent and have temporary impacts on solitude. Frequency of flights vary widely and is dependent upon military shipments (transports) and training schedules (fighter aircraft). Impacts to solitude are temporary loud engine sounds, mainly noticeable on south-facing slopes.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation

The area recommended for wilderness designation affords exceptional opportunities for primitive and unconfined types of recreation. The Amedee and Skedaddle Mountains are dissected by a myriad of steep and narrow canyons that provide challenging hiking/exploration opportunities. Jagged cliffs, caves, and volcanic spires abound on the west face of the Amedee Mountain (known locally as Wendel Cliffs). Skedaddle ridgecrest and its three peaks, along with many other unnamed canyons, ridges and peaks provide enticing goals for day hikers or backpackers. Between the crests of Amedee and Skedaddle Mountains lie Big and Little Spencer Basins. These ridge-rimmed basins afford visitors isolated camping experiences in the heart of the WSA.

An integral part of the primitive recreation experience within the core of Skedaddle WSA are the expansive vistas gained when atop the 7,680-foot height of Skedaddle Mountain. For those who make the climb, a panorama of land forms spreads before them: to the south and east, multiple mountain ranges and dry lake bed valleys of the Great Basin Desert; to the north and west, volcanic peaks of the Cascade Range rising above the Modoc Plateau; and to the southwest, the wall-like escarpment of the granitic Sierra Nevada's northernmost reaches, reflecting across the waters of Honey Lake at the foot of the Skedaddles. These vistas are unique to the Skedaddle Mountain WSA because of its location at the junction of three major geologic provinces. Viewing these natural regional landforms from within an undisturbed wilderness heightens the primitive recreation experience unique to the Skedaddle Mountains.

Good opportunities for viewing wildlife also exist within the WSA and add to a primitive recreation experience. The area recommended for wilderness provides excellent habitat to a wide variety of nesting raptors (birds of prey). The numerous cliffs and good prey-base of the area support one of the largest populations of nesting golden eagles in the region. Deer and wild horses are also common and can frequently be seen. Because of the rugged topography, varied wildlife and geographic location, the area recommended for wilderness designation truly affords the visitor excellent opportunities for a wide variety of primitive recreational experiences.

Within the area not recommended for wilderness, parcel A is not well suited to primitive recreation. The flat to gently sloping terrain is uninteresting for hiking and backpacking and offers no challenging opportunities. No unique destination type attractions occur in these areas. It is likely that given the wide range of primitive recreation opportunities in the adjacent portions of the WSA, few if any people would choose to explore parcel A. Parcel B affords good opportunities for primitive recreation, particularly in Thousand Springs Canyon, and has regularly received use primarily by chukar hunters who hike the canyons and walk the slopes each fall.

4. Special Features

This area does not contain any unique geological, biological or historic characteristics notable as special features.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 62,010 acres of the Intermountain Sagebrush/Sagebrush Steppe ecosystem. Wilderness designation of the Skedaddle WSA would not add a new ecosystem or landform to the NWPS. This WSA is in the Intermountain Sagebrush Province-Sagebrush Steppe desert ecosystem. At the present time, there are two existing wilderness areas (Jarbidge and South Warner) within this ecotype.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classifications Domain/Province/PNC	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
Intermountain/Sagebrush/ Sagebrush Steppe	3	76,699	136	4,308,329
	CALIFORNIA			
Intermountain/Sagebrush/ Sagebrush Steppe	1	31,295	4	90,420
	NEVADA			
Intermountain/Sagebrush/ Sagebrush Steppe	1	32,407	29	1,273,919

2. Expanding the opportunities for solitude or primitive recreation within a day;s driving time (five hours) f major population centers: This WSA is within a five-hour drive of six major population centers. Table 3 summarizes the number and acreage of designated wilderness areas and other BLM wilderness study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Chico	16	1,256,873	13	430,822
Redding	14	1,236,503	11	344,633
Sacramento	46	5,001,817	87	2,479,541
Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809
Oregon				
Medford	31	2,440,081	21	730,038

3. Balancing the geographic distribution of wilderness areas:

The WSA is within a 50 air-mile radius of 6 BLM WSA's recommended for wilderness designation. The South Warner Wilderness, administered by the Modoc National Forest is the only designated wilderness area within 50 air miles of the Skedaddle Mountains.

C. Manageability

The entire WSA is manageable as wilderness. However, much more effort would be required to manage the area recommended as non-wilderness than the area recommended for wilderness for protection of wilderness qualities The primary difference between the two areas would be the additional effort needed to control vehicle entry in the open terrain of the non-wilderness area. Within the area recommended for wilderness other existing or potential activities that affect or may affect management of the area as wilderness are: activities of the adjacent Sierra Army Depot's ammunition demolition facility, potential mining claim development, access to private land and potential geothermal development. These existing and potential activities warrant discussion because of their perceived impact on wilderness values within the WSA. However, upon examination, these activities do not have significant, lasting effects on wilderness values that would preclude management of the area as wilderness.

The area recommended for wilderness (see Map 1) is well suited for control of vehicle entry through a combination of natural terrain and visitor management features. Steep slopes and cliffs comprise most of the western and southern boundaries providing natural control of vehicle entry. Where the wilderness boundary follows boundary roads, a 300-foot setback is recommended to provide for motorized pull-offs, vehicle-based camping, and road maintenance. Cherrystemmed roads provide for vehicle access into the Spencer and Skedaddle Creek drainages, areas that have long been vehicle-accessible and popular for hunting. Provision of vehicle access on canyon-bottom, cherrystemmed roads to these two popular hunting areas within the recommended wilderness should reduce vehicle access pressure along that eastern boundary road and on 8 miles of access ways that will be closed within the recommended wilderness area. All boundaries along cherrystemmed roads in this recommendation include a 100-foot setback from each side of the cherrystemmed road to allow for off-road pull-off, vehicle-based camping and road maintenance.

On the eastern side of the recommended wilderness area, the boundary follows a 300-foot setback from the Skedaddle Road. The road provides an easily recognizable physical boundary feature in an area where arbitrary boundaries based on legal lines or contours would be difficult to distinguish in the field. The mountainous area west of the eastern boundary is entirely included in the recommended suitable area because it is a major portion of the Skedaddle Mountain block and contains excellent opportunities for solitude and primitive recreation. Management of the eastern boundary can be accomplished through signing the only two entry points to the region, the north and south entrances to the Skedaddle Road and through periodic field patrol. On the north, the boundary follows legal lines in terrain where vehicle use is restricted by rocky surfaces and limited access. One vehicle-way will be closed and require periodic patrol checks.

Closure of eight miles of access ways at the recommended-suitable area boundaries will be feasible through a combination of terrain features, visitor information signs and field patrol during high use periods in the fall. Closure of these ways is necessary to maintain the wilderness qualities of solitude and naturalness in the recommended wilderness area.

In the areas not recommended for wilderness, vehicle access is possible along most boundary roads surrounding parcel A. Wilderness qualities in these areas, while present, are not as high value as within the recommended wilderness area and do not warrant the increased field patrol effort that would be necessary to prevent vehicle entry into these areas from along virtually all segments of the boundary roads. Most of Parcel B is not accessible to vehicles because of steep rocky slopes and could be managed as wilderness. Deletion of this parcel from wilderness was not, however, based on vehicle control considerations and instead on conformance with public safety zone around the Sierra Army Depot's demolition facility.

Management of the Skedaddle WSA as wilderness will be affected by the activities of the Sierra Army Depot which are discussed in this report under section 3.A., Wilderness Characteristics. Past activities of the Depot have caused brief, temporary disturbances to wilderness qualities of naturalness and solitude within the WSA. These activities occur intermittently and vary with military workloads, weather conditions, and training schedules. Future activities of the Sierra Army Depot are unknown. Substantial increase in demolition activities, aircraft flights or other as yet undetermined use of the military facility could increase impacts to wilderness qualities, particularly solitude, within the recommended wilderness area. The intensity and degree of ongoing military overflights in this WSA must be considered to maintain the integrity of the wilderness experience as well as the existing and future national defense mission.

These activities are outside the realm of Bureau of Land Management control and could constitute a manageability problem if activities on the Depot site occurred with sufficient frequency and duration so as to continually disrupt solitude within the recommended wilderness area. However, at this time, and in the foreseeable future, no such activities are expected that would disrupt solitude within the WSA so consistently as to preclude managing the area for protection of its wilderness values of naturalness, primitive recreational opportunities and solitude over the long term.

Private land within the recommended wilderness is not a manageability problem. Two private inholdings are located within the recommended wilderness area. One 120-acre parcel is owned by a livestock operator and is used for stock watering. It is accessed by an existing way and abuts the boundary of the recommended wilderness. Motorized access may be required in the future for maintenance of a stock pond located on the parcel. This would be needed at most, once every few years and more likely once every ten to fifteen years. Access is available to the parcel on the Spencer Creek cherrystemmed road. The second parcel, a 160-acre piece, is located within Little Spencer Basin in the steep core portion of the recommended wilderness area. No developed use has occurred or is expected on the parcel because of its remote location, difficult access, and steep slopes. All other private lands affected by this wilderness designation are located outside the recommended wilderness area at the end of cherrystemmed roads. These parcels are owned by livestock operators and are used for livestock watering. Access to these parcels exists over the cherrystemmed roads. Vehicle traffic to the parcels would be infrequent and would not significantly affect wilderness qualities on adjacent lands.

There would be no expected manageability problems due to mineral claim development within the recommended wilderness area. Five claims filed after October 21, 1976 (post FLPMA claims) are located in the North Fork of Wendel Canyon at the end of a cherrystemmed road. No development is expected. The material, perlite, is considered subeconomic because the market value would not cover removal and transportation costs.

No manageability problems are expected from geothermal development. Geothermal development of the 830 acres of land within the Known Geothermal Resource Area (KGRA), located within the recommended wilderness area is not expected because of low resource potential, rugged terrain and alternate sites of equal or higher potential located outside the recommended suitable area where terrain is more accessible and development costs would be lower. The 16,940 acres of area considered prospectively valuable for geothermal within the recommended wilderness area is considered to have lower potential than the KGRA and is not expected to be developed.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at the time of preliminary suitable recommendation: The geology and mineralization of the Skedaddle WSA is described in the Unit Resource Analysis (URA) based on data in Mineral Resource Inventory (MRI) files (1979-1980) for the BLM Cal-Neva Planning Unit. The URA was updated in August of 1980. It states that the area's past mineral production has been limited to small sales of sand and gravel along the southern boundary of the

WSA, and prospecting and limited testing of perlite deposits. The WSA also includes portions of the Wendel-Amedee Known Geothermal Resource Area (KGRA), an area considered potentially valuable for geothermal resources. The geothermal potential determination was based on U.S. Geological Survey Memorandum of March 16, 1979 "Leasable Mineral Information, Cal-Neva Planning Unit" (no specific reference as to high, moderate or low). Geothermal resources from wells drilled outside the WSA are currently being used for the generation of electric power approximately eight miles to the west. The potential for occurrence of oil and gas in the WSA was unknown in 1980.

BLM data in the Affected Environment section of the Eagle Lake-Cedarville EIS in 1987 indicated that the WSA has potential for the occurrence of geothermal resources, an unknown potential for oil and gas, and low potential for commercial production of salable minerals. Exploration has taken place for locatable minerals, but early prospecting has not resulted in economic development. Although portions of the Wendel-Amedee KGRA lie within the boundary of the WSA, most of the 830 acres occur on steep, inaccessible terrain on the Wendel Cliffs portion of the Amedee Mountains. The rugged terrain has discouraged onsite development and there has been no interest in developing the resource from an offsite location. As of May 20, 1987 BLM records identified nine placer mining claims in the WSA. Seven of the nine claims fall within the suitable portion.

2. Summary of significant new mineral resource data collected since suitability recommendation which should be considered in the final recommendation: In 1985 and 1986, respectively, the U.S. Geological Survey (USGS) and the U.S. Bureau of Mines conducted mineral surveys of the suitable portion of the Skedaddle WSA. The results of the mineral surveys were published in 1988 in open file report USGS Bulletin 1706-C. The U.S. Bureau of Mines collected a total of 201 rock samples and 28 alluvial and placer samples. Of these, 141 rock samples were collected at prospects and mining claims. Thirty of the remaining 60 were collected at mineralized sites, and 30 were collected as reference samples at unmineralized rock sites. Five of the 28 alluvial samples were collected on placer claims (Munts and Peters 1987). Based on geologic and geochemical evidence it was determined that areas within the Skedaddle Wilderness Study Area have high to moderate potential for the occurrence of silver, gold, mercury, and antimony metallic deposits. As shown on Map 2, the central part of the Spencer Basin, upper Thousand Springs Canyon, and the south fork of Wendel Canyon have high mineral resource potential for the occurrence of gold, silver, mercury, and antimony while the area surrounding these locations has moderate mineral resource potential for the same metals. An area in Wendel Canyon has high potential for perlite, and an adjacent area to the south has low mineral potential for the same commodity. The southwestern corner of the WSA has moderate resource potential for geothermal energy and much

of the western half of the study area has low potential for geothermal energy. There is no oil or gas resource potential in the study area (USGS Bulletin 1706-C). The sand and gravel deposits along the south and west perimeter of the WSA have been used in the past, but similar deposits closer to local markets are meeting current needs.

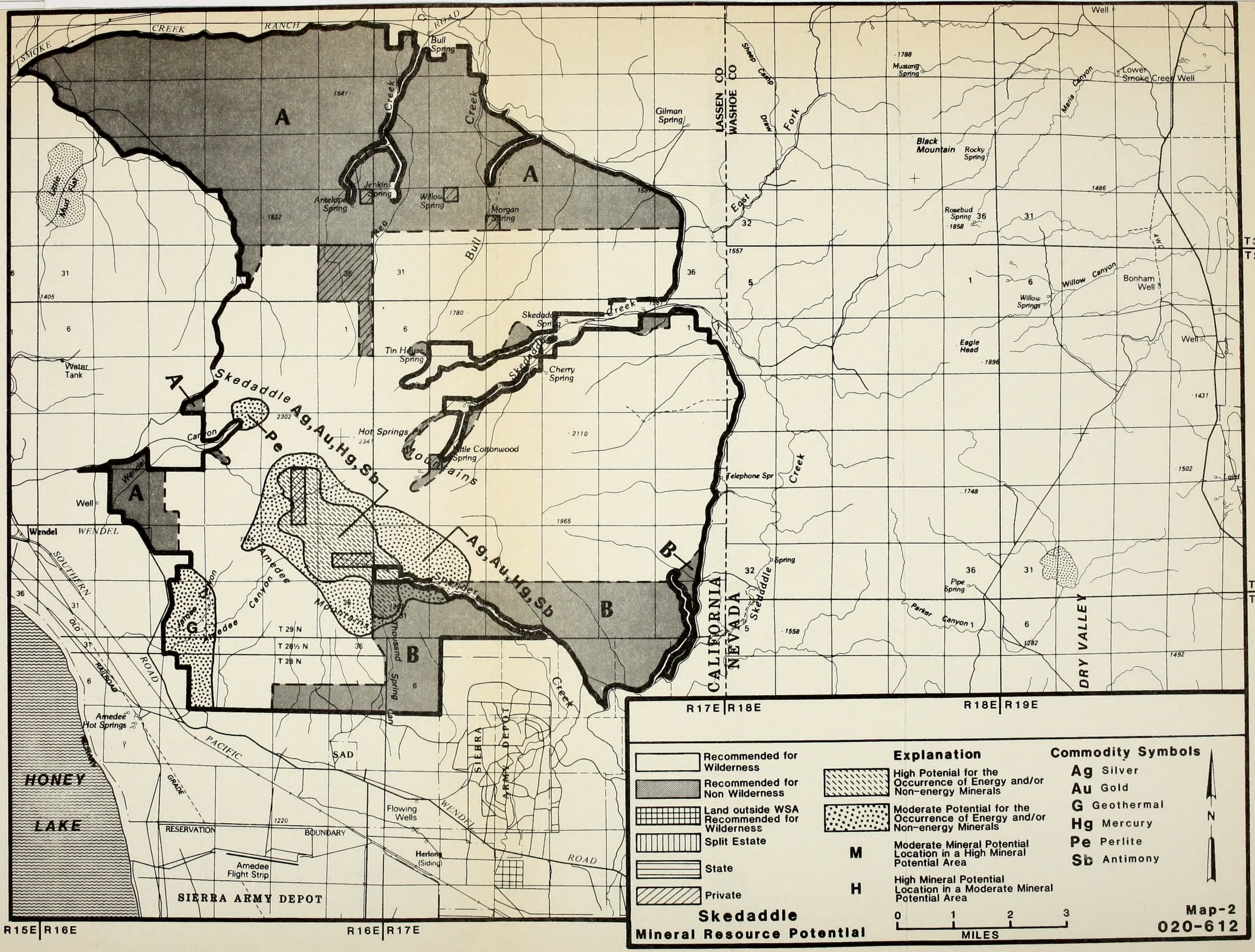
New USGS data indicates the WSA is currently underlain by a thermal system that is responsible for the geothermal potential. Scott and Miller (1983) and Scott (1983) also concluded that the area has no resource potential for oil and gas because of the thin sedimentary section there.

Between 1980 and December 1987, there was little or no known mineral exploration activity in the WSA. A Plan of Operation was submitted for proposed development of the post-FLPMA perlite claims in Wendel Canyon in August 1987. The proposed activity as outlined in the plan was determined to be impairing. Based on BLM's assessment of the low reclamation potential for the area, the plan was not approved. Current mineral interests in the WSA are indicated by no oil and gas or geothermal leases. Table 4 lists the BLM mining claim records as of January 13, 1988.

Table 4 - Mining Claims

		NO.			ACRES	
TYPE	SUITABLE	NONSUIT.	TOTAL	SUITABLE	NONSUIT.	TOTAL
Mining Claims						
Lode	0	0	0	0	0	0
Placer	5	0	5	200	0	200
Mill Sites	0	0	0	0	0	0
Total	0	0	5	200	0	200

All of the active (post-FLPMA) claims remaining in the suitable portion of the WSA are for Perlite located in the upper portion of Wendel Canyon, an area defined as having high potential for the occurrence of Perlite (USGS Bulletin 1706-C).


Skedaddle
Mineral Resource Potential
Map-2
020-612
Explanation
Recommended for Wilderness
Recommended for Non Wilderness
Land outside WSA Recommended for Wilderness
Split Estate
State
Private
High Potential for the Occurrence of Energy and/or Non-energy Minerals
Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals
M Moderate Mineral Potential Location in a High Mineral Potential Area
H High Mineral Potential Location in a Moderate Mineral Potential Area
Commodity Symbols
Ag Silver
Au Gold
G Geothermal
Hg Mercury
Pe Perlite
Sb Antimony
N
0 1 2 3
MILES
A
B
G
Skedaddle Ag,Au,Hg,Sb
Ag,Au,Hg,Sb
Pe
Skedaddle Mountains
Amedee Mountains
LASSEN CO
WASHOE CO
CALIFORNIA
NEVADA
DRY VALLEY
HONEY LAKE
SIERRA ARMY DEPOT
SMOKE CREEK RANCH ROAD
SOUTHERN PACIFIC RAILROAD
OLD GRADE ROAD
WENDEL ROAD
RESERVATION BOUNDARY
Wendel
WENDEL
Amedee Hot Springs
Amedee Flight Strip
Herlong (Siding)
Flowing Wells
SAD
Bull Spring
Jenkins Spring
Antelope Spring
Willow Spring
Morgan Spring
Gilman Spring
Skedaddle Spring
Tin House Spring
Cherry Spring
Hot Springs
Little Cottonwood Spring
Telephone Spr
Spring
Pipe Spring
Willow Springs
Rosebud Spring
Mustang Spring
Black Mountain
Rocky Spring
Eagle Head
Lower Smoke Creek Well
Bonham Well
Well
Water Tank
Little Mud Flat
Rea Creek
Bull Creek
Skedaddle Creek
Sheep Camp Draw
East Fork
Creek
Willow Canyon
Maria Canyon
Parker Canyon
Wendel Canyon
Amedee Canyon
Jameson Canyon
Spencer
Thousand Spring Can
T30N
T29N
T28N
T 29 N
T 28½ N
T 28 N
R15E
R16E
R17E
R18E
R19E
1788
1641
1622
1597
1405
1780
2302
2341
2110
1965
1557
1587
1858
1486
1896
1431
1502
1748
1558
1282
1492
1220
31
36
6
1
32
5

E. Impacts on Resources

Table 5 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/ NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE	NO-WILDERNESS ACTION ALTERNATIVE
Wilderness Values	Naturalness reduced on 10 acres due to range improvements in wilderness portion. Solitude in wilderness portion would improve with closure of 8 miles of ways. Naturalness, solitude and primitive recreation would be adversely impacted on up to 7,000 acres in non-wilderness area by powerline construction in proposed utility corridor. Geothermal development could impact naturalness and solitude on up to 500 acres in the non-wilderness portion.	Naturalness reduced on 10 acres due to range improvements. Solitude improved by closure of 47 miles of ways and elimination of 4,200 visitor days of vehicle recreation. There would be some illegal OHV use on the perimeter of the area as no natural barriers exist.	Naturalness reduced on 10 acres due to range improvements in the wilderness portion. Solitude in wilderness portion would improve with closure of 11 miles of ways. Naturalness, solitude and primitive recreation would be adversely impacted on up to 17,000 acres in non-wilderness area if both powerlines were constructed in two proposed utility corridors. Geothermal development could impact naturalness and solitude on up to 780 acres in the non-wilderness portion.	Naturalness reduced on 10 acres due to range improvements. Naturalness, solitude and primitive recreation would be adversely impacted on up to 17,000 acres if both powerlines are constructed in the 2 proposed utility corridors. Geothermal development could impact naturalness and solitude on up to 500 acres.
Mineral Resource Development	No significant impact in 37,339 acres designated wilderness area due to low mineral potential.	Negligible impact due to low mineral potential of the area.	No significant impact in 24,644 acres designated wilderness area due to low mineral potential.	No impact as area would be open for minerals. Low potential does not indicate any development will occur.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/ NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE	NO-WILDERNESS ACTION ALTERNATIVE
Mineral Resource Development (Cont'd)	Non-wilderness on 25,574 acres available but low mineral potential means activity not likely.		Non-wilderness on 38,546 acres available but low mineral potential means activity not likely.	
Recreational OHV Use	Wilderness designation would close 8 miles of ways. Very little impact as 39 mi. of ways are open and the existing 4,200 visitor days of OHV use would occur in the non-wilderness portion.	Loss of 4,200 visitor-days of recreation vehicle use as 47 miles of ways and 15 miles of road would be closed.	Wilderness designation would close 11 miles of ways. Very little impact as 36 miles of ways are open and the existing 4,200 visitor days of OHV use would use the non-wilderness portion.	No impact as existing 47 miles of ways would be open. Use is not expected to increase much beyond present 4,200 visitor-days.
Geothermal Resource Development	Geothermal resource development on 1,040 acres of the Wendel/Amedee KGRA and 16,940 acres of prospectively valuable for geothermal area within the WSA would be foregone. Impact is minimal due to low potential and rugged terrain. The remaining 500 acres of the KGRA and 4,600 acres of prospectively valuable for geothermal area within the WSA would be available for development.	Geothermal resource development on 1,540 acres of Wendel/ Amedee KGRA and 21,540 acres of prospectively valuable geothermal area within the WSA would be foregone. Impact is considered minimal due to low potential and rugged terrain.	Geothermal resource development on 760 acres of the Wendel/ Amedee KGRA and 14,380 acres of prospective valuable for geothermal area within the WSA would be foregone. Impact is minimal due to low potential and rugged terrain. The remaining 780 acres of the KGRA and 7,160 acres of prospectively valuable for geothermal area within the WSA would be available for development.	No impact on Geothermal resource development.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/ NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE	NO-WILDERNESS ACTION ALTERNATIVE
Trans Sierra Utility Corridor	No impact on 7 mi. of high priority alignment through the non-designated area. 4 miles of a 10-mile segment of low priority alignment could not be built through the designated area.	No development of 7 miles of high priority potential utility line would occur through the WSA.	No impact on 7 miles of high priority or 10 miles of low priority alignment through the non-designated area.	No impact on 2 segments of potential Trans Sierra Utility corridor alignments. Either the 7-mile portion of a high priority alignment or the 10-mile portion of a low-priority alignment could be developed.
Private Waters	No significant change in impact as wilderness use would replace some of the vehicle use presently taking place.	Trespass on private water sources on inholdings would decline.	No significant change in impact as wilderness use would replace some of the vehicle use presently taking place.	No change in present situations where during hunting season trespass on springs on private inholdings occurs.

F. Local Social and Economic Considerations

Lassen County and Sierra Army Depot expressed concern during development of the wilderness study of the WSA and through comments on the draft wilderness EIS that wilderness designation of the Skedaddle WSA is incompatible with operations of the adjacent depot demolition facility. Both Lassen County and the Sierra Army Depot stated that constraints on the operation of the Sierra Army Depot could result from wilderness designation which could have serious adverse impacts to the economy of Lassen County through reduction in the number of people working at the base.

The Sierra Army Depot is the single largest civilian employer in Lassen County and any restriction of Depot operations could have impacts on both the capability of the Depot to carry out its mission and on the number of civilians employed at the base.

According to the response submitted by the Sierra Army Depot to the draft wilderness EIS, Sierra Army Depot is the only military facility in the country where large scale (up to 10,000 lbs. of TNT) open-air demolition activities are authorized to occur. BLM recommends that Congress review the situation concerning the proximity of the Sierra Army Depot during review of legislation and make findings that would allow the continuing and potential expansion of operations on the Sierra Army Depot.

G. Summary of - WSA Specific Comments

Public involvement has occurred throughout the wilderness review process. Comments were used to develop significant study issues and alternatives.

A Technical Review Team (TRT) was used to help identify issues and formulate the alternatives analyzed in the EIS. It was used as a tool to lessen the chances of polarization between interest groups and to provide the Bureau with high quality public input representative of the positions of key groups interested in or affected by wilderness designation. Input provided by the TRT was used in developing the WSA's wilderness recommendation.

For the Eagle Lake-Cedarville Wilderness EIS that included the Skedaddle Mountain WSA, the Susanville District Advisory Council identified the following interests and resources to be represented on an eight member TRT: livestock-adjacent land owners; wildlife-agencies-sportsmen; energy-utilities, wild horses; motorized recreation; cultural-historical-archeological; wilderness and dispersed recreation; Bureau of Land Management. The representatives were knowledgeable and highly respected members of their interest groups. The TRT members toured the WSA, held lengthy discussions spanning many weeks and eventually reached unanimous agreement that a partial-wilderness recommendation was appropriate for the WSA. The team's recommendation of 60% suitable and 40% non-suitable was supported by the Susanville District Advisory Council and by BLM and is the recommended action for this WSA.

Key issues raised through public involvement and analyzed by the TRT and in the wilderness EIS were: impact of wilderness designation on activities of Sierra Army Depot (see Section F., Local Social and Economic Considerations for a discussion of this issue); high quality wilderness values in the Skedaddle WSA; a wilderness complex where five adjacent WSA's separated only by boundary roads including Skedaddle WSA would be managed as a wilderness complex inclusive of the road (this was analyzed in the all-wilderness alternative of the EIS); concern that wilderness would prevent potential mineral and geothermal development, livestock management activities and motorized recreation access for hunting; concern that wilderness would limit management of wild horses and burro populations; concern that wilderness would preclude development of potential high voltage, electric transmission lines through the region. All of these issues were addressed in each of the four alternatives analyzed in the EIS, all wilderness, partial wilderness proposed action (60% wilderness, 40% nonwilderness), partial wilderness (39% wilderness, 61% nonwilderness) and no wilderness.

During formal public review of the draft EIS a total of 361 comments were received that addressed this WSA specifically or as part of general comments on all WSA's in the draft EIS. Of those 361 comments, 13 were oral statements received at three public hearings held on the draft EIS and 348 were written comments. In general, 62 commenters supported all-wilderness, 11 supported no-wilderness and 76 supported partial-wilderness recommended by BLM. Another 212 commenters supported more wilderness than was addressed in the draft EIS.

Those favoring wilderness cited the Skedaddle Mountains' high quality wilderness values. Particular mention was made of the area's rugged topography, many peaks, ridges and canyons that afford excellent opportunities for exploration and challenging primitive recreation. Riparian areas, numerous springs and aspen groves were also cited as enhancing the natural character of the area. Respondents also emphasized the area's diversity of wildlife with particular emphasis given to the large populations of nesting raptors that afford excellent opportunities for viewing birds of prey, particularly golden eagles.

Respondents opposed to wilderness designation in the Skedaddle WSA cited adverse impacts to solitude and naturalness from activities at the Sierra Army Depot's ammunition demolition facility adjacent to the WSA's south flank. Concern was expressed by both Sierra Army Depot and Lassen County that wilderness designation of lands within Skedaddle WSA could impose restrictions on operations at Sierra Army Depot which in turn would limit the capability of the depot to carry out its mission. Lassen County and the depot stated that any reduction in depot operations would have adverse effects on Lassen County's economy because of the large number of civilian employees at the depot.

Other comments against wilderness cited restrictions that wilderness designation would cause on popular roads for hunter access. Restriction or prohibition of exploration and development of the area's geothermal resources was mentioned by commenters who do not want the area designated as wilderness. Livestock operators who use the area cited concern that, despite livestock's grandfathered provisions in the wilderness act, livestock management activities, particularly motorized access for water facility inspection and maintenance and sheep camp movement, would be restricted. Restrictions or prohibition on development of new water facilities, springs, and stock ponds, was also cited as reasons for opposition to wilderness. Others opposed to wilderness cited the elimination of possible mineral development in designated wilderness as a general reason to oppose wilderness designation.

Responses to the proposed action/partial-wilderness of the wilderness EIS by local and state agency and elected officials varied. California Department of Fish and Game supported the proposed action as did Nevada County (California) Supervisor Joel Gustavson. Lassen County Board of Supervisors supported no-wilderness. Washoe County did not submit comments.

Letters were received from two State agencies and five Federal agencies that took no positions as to a recommendation on alternatives or acreage to be preserved as wilderness. They were the California Dept. of Water Resources, Nevada Division of Historic Preservation, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, USGS and the Environmental Protection Agency.

APPENDIX 1

ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION

SKEDADDLE WSA (CA-020-612)

PARCEL No.	LEGAL DESCRIPTION TWNSHP	RNG	SEC	MERIDIAN	TOTAL ACREAGE	NUMBER OF OWNERS	TYPE OF OWNERSHIP BY ESTATE SURFACE ESTATE	SUBSURFACE ESTATE	PRESENTLY PROPOSED FOR ACQUISITION	PREFERRED METHOD OF ACQUISITION	ESTIMATED COST OF ACQUISITION LAND COSTS ($1000)	PROCESSING COSTS ($1000)
1	29N.	16E.	23	MDM	160	1	PRIVATE	PRIVATE	YES	PURCHASE	24.0	2.5

These figures were derived from Bureau Land Records and provide for more detail than GIS estimates and therefore may differ from acreage summaries in Table 1.

South Warner Contiguous

CA-020-708

SOUTH WARNER CONTIGUOUS WILDERNESS STUDY AREA (WSA)

(CA-020-708)

1. THE STUDY AREA --- 4,330 acres

The South Warner Contiguous WSA is located in Modoc County, California, approximately 15 miles south of Cedarville. The WSA consists of nine separate parcels located along 18 miles of the east boundary of the South Warner Wilderness Area, which is a part of the Modoc National Forest (USFS). The nine parcels range in size from 40 acres to 2,229 acres. The adjacent South Warner Wilderness Area is 70,385 acres in size. There are no private or State lands within the WSA (see Map 1 and Table 1).

The WSA parcels form portions of the lower and middle slopes of the east side of the Warner Mountains. This side of the range is dominated by large-scale faulting which results in steep slopes and exposed rock faces. The exposed rocks are mostly sedimentary and deep canyons have eroded into the face. The crest of the Warners effectively block precipitation, resulting in barren slopes with scattered brush and tree cover. The combination of eroded topography and sparse vegetation creates a scenic "badlands" type of landscape. Many of the canyons contains live streams with associated riparian zones of aspen, conifers and dense shrubs, which provide contrast to the adjacent barren hillsides.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act of 1976 (FLPMA). It is included in the California Section 603 Wilderness Study Report package, as it contains a suitable recommendation which was felt should be included for congressional consideration. The WSA was studied as a part of the California Section 202 Wilderness Study Areas' Environmental Impact Statement finalized in September 1988. There were three alternatives analyzed in the EIS: an all-wilderness alternative, a partial-wilderness alternative designating 27% of the WSA as wilderness, and a no-wilderness alternative.

2. RECOMMENDATION AND RATIONALE -

1,161	acres recommended for wilderness
3,169	BLM acres recommended for nonwilderness

Twenty-seven percent partial wilderness is the recommendation for this WSA. 3,169 acres in this WSA are released for uses other than wilderness.

The all-wilderness alternative is the environmentally-preferred alternative because it would result in the least change from the existing natural environment over time. The selected alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

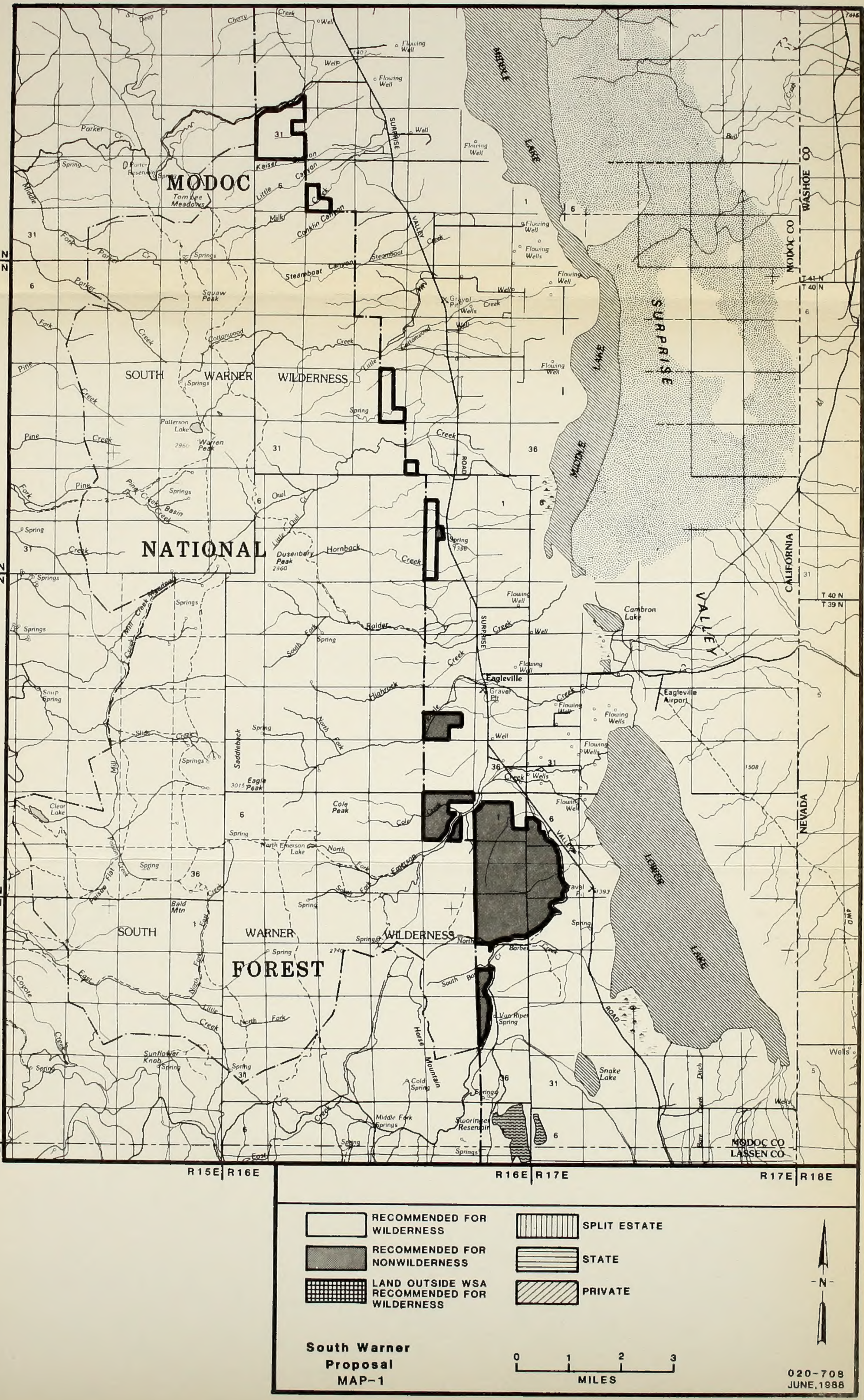
The part of the WSA recommended for wilderness is recommended primarily because it is land that comprises part of a bighorn sheep management area that fits into the existing USFS South Warner Wilderness Area. The areas not recommended for wilderness do not add any values not already present in the existing adjacent South Warner Wilderness.

The area recommended suitable for wilderness is in a natural setting with almost a complete lack of evidence of the impacts of man. It is steep, rugged and scenic, with opportunities for solitude and primitive and unconfined recreation. Recreational use is projected to stay at present low levels due to both the steepness of terrain and the lack of access from the east and the distance from the main trail system in the South Warner Wilderness to the west. This lack of access is a positive benefit for the management of bighorn sheep.

There are no significant resource conflicts that would be lost to wilderness management. Mineral values are projected as low. No other forms of development are proposed or projected to be proposed in the area.

The main reason that the northern area is recommended as suitable is that it is part of the habitat for bighorn sheep. The USFS lands adjacent to these recommended lands is a bighorn sheep management area. A herd had been reintroduced into the area and was increasing in size until a recent outbreak of viral pneumonia exterminated them. Further study is needed to insure that future reintroductions can be protected from a recurrence of this disaster. The habitat itself was supporting the sheep and the initial herd was increasing in size, showing that this habitat would support a good-sized herd of bighorn sheep. The BLM parcels recommended-suitable were being used by the sheep and make a logical extension of the adjacent USFS South Warner Wilderness lands. The recommended-suitable wilderness parcels could easily be managed to preserve wilderness values. The steep, rugged terrain naturally precludes any use of motorized vehicles. There are no resource conflicts now or projected in the future that would cause any management problems. No vehicular access ways would need to be closed.

The parcels that were not recommended as suitable are outside the bighorn sheep management area and would not add any new values to the existing South Warner Wilderness Area. They repeat terrain features and vegetative types that are already represented by thousands of acres within the South Warner Wilderness. They would be manageable as wilderness with only minor manageability concerns. The three southernmost parcels either have a road through them (the Emerson Campground road) or have a boundary road that could allow vehicles to pull off the existing road onto lands within the WSA. There is one mile of existing vehicle way that would remain available for vehicular use.



RECOMMENDED FOR WILDERNESS

RECOMMENDED FOR NONWILDERNESS

LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS

SPLIT ESTATE

STATE

PRIVATE

South Warner Proposal
MAP-1

020-708
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(Surface and subsurface)	4,330
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		4,330
Within Recommended Wilderness Boundary		
BLM	(Within WSA)	1,161
BLM	(Outside WSA)	0
Split Estate	(Within WSA)	0
Split Estate	(Outside WSA)	0
Total BLM Land Recommended for Wilderness		1,161
Inholdings		
State		0
Private		0
Within Area Not Recommended for Wilderness		
BLM	(Surface and subsurface)	3,169
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		3,169

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. WILDERNESS CHARACTERISTICS

1. Naturalness

The rugged, steep topography has contributed to keeping this area in a natural condition with only a few minor impacts from man's activity. These are found in the three most southerly parcels. All the remaining parcels are entirely natural in character. The most southerly parcel is crossed by a quarter-mile of fence with an adjacent vehicle-way that continues for an additional quarter-mile. Both are minimal disturbances. The next parcels north, which are the largest of the parcels, have two developed springs, one of which is fenced, and two vehicle-ways totalling 1-1/2 miles. This parcel also has two miles of bladed fire line constructed in 1984 to prevent a fire from burning into the South Warner Wilderness. The fire lines were water-barred and vehicle access was closed after the fire. The fire scar itself covers approximately 910 acres and is naturally revegetating with grasses, forbs and shrubs found on-site before the fire. These impacts are minimal and do not significantly impact the overall naturalness of the area. The third parcel north is bisected by the Emerson Road, which is a cherrystemmed road to the USFS Emerson Campground, a small enclave of nonwilderness projecting into the southeastern corner of the South Warner Wilderness Area. All the remaining parcels have no identified impacts to naturalness. The overall landscape of the WSA has retained its natural character.

2. Solitude

The WSA does contain outstanding opportunities for solitude. Although the individual parcels are small, the eroded topography, deep canyons and ravines provide numerous opportunities for the visitors to find solitude. There are some impacts on solitude as these parcels are close to agricultural fields in the Surprise Valley. When people are on the ridgelines, they would be aware of farming activity and traffic on Modoc County Road #1, which is sometimes less than one mile away.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation

The WSA contains opportunities for primitive and unconfined recreation associated with hunting, hiking, wildlife observation, rock climbing and cross-country skiing. The opportunities in the middle parcels are somewhat limited by a lack of legal access across farmers' fields on the east and a lack of physical access from the west due to steep, rugged terrain and distance from the USFS trail system in the adjacent South Warner Wilderness. At the north and south ends, access is provided by the Granger Creek, Emerson and Patterson guard station roads.

4. Special Features

The WSA contains a small portion of the year-long habitat of the Warner Mountain bighorn sheep herd. The herd was recently wiped out by a pneumonia epidemic. At this time it has not been determined if a reintroduction will be attempted.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the Diversity of Natural Systems and Features as Represented by Ecosystems: This WSA contains 4,330 acres of the Intermountain Sagebrush/Sagebrush Steppe ecosystem. Wilderness designation of this WSA would not add a new ecosystem or landform to the NWPS.

   The WSA is in the sagebrush-steppe ecosystem and is contiguous to one of the two existing wilderness areas representing this ecosystem. They are the adjacent South Warner and the Jarbridge Wilderness, which is in Nevada.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
NATIONWIDE				
Intermountain Sagebrush/ Sagebrush Steppe	3	76,699	136	4,366,010
CALIFORNIA				
Intermountain Sagebrush/ Sagebrush Steppe	1	31,295	4	148,101

2. Expanding the Opportunity for Solitude or Primitive Recreation Within a Day's Driving Time (5 hours) of Major Population Centers The South Warner Contiguous WSA is within a five-hour drive of five major metropolitan areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3

Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas areas	 acres	Other BLM Studies areas	 acres
California				
Redding	14	1,236,503	11	344,633
Chico	16	1,286,873	13	430,822
Yuba City	44	4,951,805	85	2,459,500
Oregon				
Medford	31	2,440,081	21	730,038
Nevada				
Reno	39	4,647,230	175	6,940,809

3. Balancing the Geographic Distribution of Wilderness Areas

There is one existing unit of the National Wilderness Preservation System within 50 air miles. It is the adjacent South Warner Wilderness, managed by the Modoc National Forest. There are eight other recommended-suitable BLM WSAs within 50 air miles of the South Warner Contiguous WSA; Massacre Rim, East Fork High Rock Canyon, High Rock Canyon, Little High Rock Canyon, High Rock Lake, Twin Peaks, Tunnison Mountain and Sheldon Contiguous.

C. Manageability

The South Warner Contiguous WSA is manageable as wilderness. The lack of existing or projected resource conflicts and the lack of physical access to most of the parcels creates a manageable wilderness. The three most southerly parcels would require more management action as they contain the two miles of ways and have either boundary roads or cherrystemmed roads that could be driven off of by hunters or others.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of Preliminary Suitability Recommendation: At the time of the recommendation process for the South Warner Contiguous WSA, BLM Unit Resource Analysis (URA) for the

Tuledad Planning Unit URA (1976) identified areas of high potential for the occurrence of geothermal and saleable resources which included portions of the WSA. A U.S. Geological Survey memorandum (October 17, 1975) also identified areas within the WSA as being prospectively valuable for oil and gas, sodium, potassium, and geothermal resources. The area encompassing the WSA was not considered valuable for locatable minerals although prospecting has occurred in the past. At the time of the WSA recommendation, there were no mining claims recorded, nor was any known mining activity taking place within the boundaries of the study area.

BLM data and information in the Affected Environment section of the California Section 202 Wilderness Study Areas EIS (1987) indicated the WSA has a low geologic favorability for the occurrence of mineral resources. In a mineral resource survey conducted for the Forest Service, South Warner Wilderness (Duffield and Weldin, 1976), the area was characterized as having low potential for development of economic quantities of any mineral commodity. There is a history, including visible evidence, of locatable mineral activity. An estimated 10 to 20 mining claims have been located in the WSA prior to 1955, but none are currently recorded with BLM. With the exception of limited production of optical grade calcite, little or no production had been recorded for prospects within the WSA. The potential for the occurrence of oil and gas resources was considered low based on prior volcanic activity that would have destroyed any oil and gas trapped in the rocks (Sandberg, 1983). Geothermal potential is limited by the Surprise Valley fault zone which lies to the east of the WSA and is considered low. Exploration drilling has indicated potential may be higher on the east side of the fault. At the time of the EIS, there were no mineral leases encumbering the subject lands.

The 1987 EIS (Affected Environment section) indicated no saleable mineral sites (sand and gravel) occurred within the WSA. Nearly all production in the area comes from private sources.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: A mineral survey of the WSA was conducted by the U.S. Bureau of Mines during 1986 and 1987. Their final open-file report was published in 1988. The report was based on a literature search, examination of BLM and County mining records, field examination and sampling. A total of 134 rock and 31 alluvial samples were taken. No visible mineralization was observed. Sampling also failed to show economic occurrences of locatable minerals, although additional mapping and sampling was recommended for a portion of the WSA where there are indications of an epigenetic gold deposit. No oil or gas resources were identified during the study. Scott (1983, D-11) considered the region, including the WSA, to have low to zero potential. The WSA is near the Lake City-Surprise Valley KGRA. No geothermal leases exist in the WSA, nor is there any evidence of the area having been explored for geothermal resources and the potential for occurrence is considered low.

Sand and gravel resources occur within and adjacent to the WSA. Some of these occur along narrow drainages extending into the WSA, but are generally small. Larger terrace deposits similar to those occurring outside the WSA are found inside and adjacent to the area. Poor access and abundant other sources along Modoc Highway 1 would make development of the deposits within WSA highly unlikely.

The occurrence of zeolites was noted during the field exam and through sampling. The deposits were considered small, low-grade, and have low potential for future development. No sodium or potassium resources were identified.

Interest in mineral exploration is indicated by a BLM mining claim records search conducted March 25, 1988, which showed that no unpatented mining claims or mineral leases exist within the South Warner Contiguous WSA. Due to the low mineral potential of the WSA no mineral resource potential map was prepared.

E. SUMMARY OF ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (PARTIAL-WILDERNESS	ALL-WILDERNESS ALTERNATIVE	NOWILDERNESS/NO ACTION ALTERNATIVE
Impacts on Wilderness Values	Wilderness designation of 1,161 acres of the South Warner Contiguous WSA will result in a slight positive benefit to wilderness values. Long-term protection from unanticipated future actions that could result in potential adverse impacts will be provided. Wilderness values within the 1,161 acres will be retained with 15 AUMs of continued livestock grazing not anticipated to affect existing wilderness values. Wilderness values within the 3,169 acres of the WSA not designated wilderness will generally be retained. Continued recreational OHV use on a total of 2 miles of vehicle ways will have a negligible impact on the perception of naturalness and will periodically result in minor disruptions of solitude. Continued livestock grazing at 135 AUMs is not anticipated to affect existing wilderness values with negligible impacts to solitude resulting from three vehicle trips annually to maintain the existing two spring developments and one-quarter mile of fencing. No other activities are planned within the nonwilderness portion of the WSA.	Wilderness designation of the entire 4,330-acre South Warner Contiguous WSA would have a slight positive benefit on wilderness values. The closure of two miles of vehicle ways and elimination of 50 visitor-days of recreational OHV use would locally improve the perception of naturalness and sense of solitude. Livestock grazing use would continue at the existing level of 150 AUMs. Maintenance activities for existing livestock facilities would require three vehicle trips annually resulting in negligible impacts to solitude. No other management actions are projected for the WSA. Long-term protection from unanticipated future actions that could result in potential adverse impacts would be provided.	Wilderness values within the 4,330-acre WSA would generally be retained. Continued recreational OHV use on a total of 2 miles of vehicle ways would have a negligible impact on the perception of naturalness and periodically result in minor disruptions of solitude. Continued livestock grazing at 150 AUMs is not anticipated to affect existing wilderness values with negligible impacts to solitude resulting from three vehicle trips annually to maintain the existing two spring developments and one-quarter mile of fencing. No other activities are planned within the WSA.

F. LOCAL SOCIAL AND ECONOMIC CONSIDERATIONS

No local social or economic impacts of any significance were identified in the Final Environmental Impact Statement.

G. SUMMARY OF WSA SPECIFIC PUBLIC COMMENTS

Public involvement has occurred throughout the wilderness review process. Comments were used to develop significant study issues and alternatives.

In preparation of the final EIS, all comments, including those from the hearing transcripts, were reviewed and considered. Comments that presented new data, questioned findings and analysis, or raised questions or issues relating to the environmental impacts of the Proposed Action or alternatives were responded to. General comments favoring a specific alternative have been noted and considered, but required no specific response. Comments addressing items outside of the scope of this EIS were not responded to.

During formal public review of the draft EIS, a total of 106 interested citizens, Federal, State, local agencies and private organizations submitted comments on the California Section 202 Wilderness Study Areas Draft EIS. Of the 106 letters, there were 70 letters which expressed either a general comment favoring a specific alternative, or were nonspecific. There were 19 letters which specifically addressed the South Warner WSA. Several that supported the proposed action of partial designation. The majority favored the designation of the entire WSAs as wilderness. There were no responses supporting no-wilderness. Those supporting the BLM recommendation thought it was balanced and left some areas for existing vehicle use. Those supporting all-wilderness mentioned the scenic nature of the WSA, its wildlife values, with bighorn sheep, in particular, receiving numerous mentions, and the lack of resource conflicts as reasons to make the area wilderness. Several people mentioned that they thought wilderness designation would eliminate domestic livestock grazing and give more area to the bighorn sheep. We replied in the Final EIS that domestic grazing is a use sanctioned by congress and is not eliminated by wilderness designation.

The Park Service, U.S. Forest Service, Environmental Protection Agency, Lahontan Regional Water Quality Control Board and the California State Clearinghouse sent responses to the draft EIS. The Park Service said they had no comment. The Forest Service pointed out several small map changes that were corrected. The EPA supported the BLM's proposed action and appreciated the discussion on water quality. The Lahontan Regional Water Quality Control Board said there appeared to be little difference in potential water quality impacts and asked to be informed of any future proposed changes in management of the nonwilderness areas which could affect water quality. The State of California Clearinghouse commented on fire protection and the need for wilderness closer to urban areas that were generic to all wilderness and not specific to the South Warner WSA.

No comments were received from local governments.

Timbered Crater

CA-030-201

TIMBERED CRATER WILDERNESS STUDY AREA (WSA)

CA-030-201

Includes the Baker Cypress-Lava Instant Study Area CA-030-301

1. THE STUDY AREA --- 18,095 acres

The Timbered Crater WSA is located at the junction of Shasta, Siskiyou and Modoc Counties in northeastern California (see Map 1 and Table 1). The nearest town is Fall River Mills, 10 miles south of the WSA. The nearest city, Redding, California, is located 50 miles southwest. The study area contains 17,896 acres of Bureau of Land Management (BLM) land and 199 acres of private land in two parcels belonging to one owner. The WSA is bounded on the northeast by private agricultural lands in the Little Hot Springs Valley. The southeast and western boundaries are formed by the Shasta-Trinity National Forest lands. The southern boundary is formed by the Ahjumawi Lava Springs State Park lands and private lands used for homesites in the vicinity of the north end of Fall River Valley.

The WSA contains all of the Baker Cypress Natural Area (1,148 acres), which was an Instant Study Area (ISA) included as part of this WSA. The Baker Cypress is a minor species of tree restricted to a small number of groves spread along the Cascade Sierra mountains of Northern California and extending into Southern Oregon. The natural area is located in the northern part of the WSA. The remainder of the WSA is mostly made up of a large lava flow. The lava flow is extremely rough and rugged with a lot of exposed rock interspersed with small pockets of soil. The cracks in the lava and soil pockets support a very scattered population of brush, shrubs, mountain mahogany and ponderosa pine. The general topography of the lava flow is characterized by low buttes, shallow depressions and drainages.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) and was included in the North Central California Wilderness EIS, finalized December 1986. There were three alternatives analyzed in the EIS: an all-wilderness alternative, a partial-wilderness alternative designating 80% of the WSA as wilderness and a no-wilderness alternative.

2. RECOMMENDATION AND RATIONALE -

0	acres recommended for wilderness
17,896	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness.

The all-wilderness alternative is the environmentally preferred alternative. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

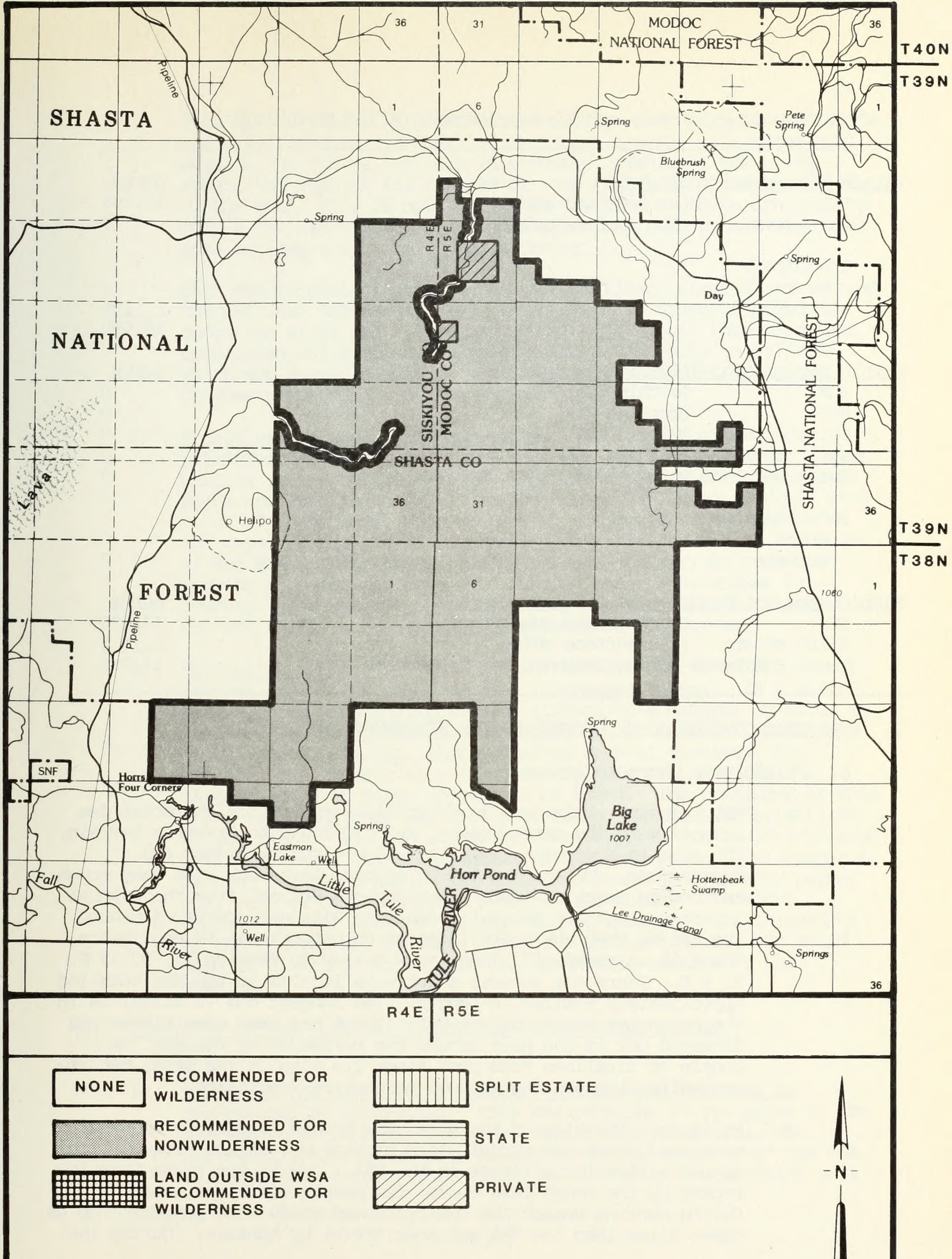
The WSA is recommended nonsuitable because the area's wilderness values are marginal. The quality that an area should have to be added to the National Wilderness Preservation System (NWPS) is lacking in this WSA. The area is natural in character with a few evidences of man, such as an old flat rock quarry and two cherrystemmed roads leading into the WSA. There are approximately five miles of ways, and a primitive route of travel, which will remain available for vehicular use. The area is dull and homogeneous in character, consisting of a fairly level to gently rolling lava bed that contains scattered patches of brush with widely spaced scattered pine trees growing in soil pockets. The only part of the WSA that is distinctive is the Baker cypress found growing in patches near the northern end of the WSA. These are already protected by a withdrawal as a Natural Area. This designation has been effective in providing the area with adequate management and protection.

The WSA has opportunities for solitude but little reason for anyone to go there to avail themselves of this opportunity. The past use of the area has been minimal. People do not get far away from the cherrystemmed roads, due to the rough uneven lava terrain. The opportunities for primitive and unconfined recreation are extremely limited. This terrain, with its rough lava and brushy patches of manzanita or mountain mahogany, makes hiking difficult. Travelling from one place to another, there are no water courses or ridgelines to follow. There are no destination points that would attract a visitor to enter the area. No one would take horses into the area without risking injury. The Baker cypress is located on the north end of the WSA where there is more soil. This area is accessible from the existing cherrystemmed roads and ways in and near the perimeter.

The area is in the western ponderosa forest realm of the Sierra Forest Ecoregion. There is only one unit of the NWPS in this type. The Timbered Crater unit is not really typical of this realm and ecoregion. It is a lava field with scattered ponderosa pine growing in soil pockets widely scattered throughout the unit. There are other units in the NWPS that closely resemble the lava field in this unit. They are found nearby at Lassen National Park, Lava Beds NM and Thousand Lakes Wilderness on the Lassen National Forest.

Although the overall WSA is considered manageable, the two private inholdings located in the northern end of the WSA could cause a problem in the future. They are owned by a timber managing company. They have not indicated that they have any immediate intensive land management plans for the area.

In conclusion, the main reason that this WSA was recommended nonsuitable, was that its wilderness qualities are considered low. The area is roadless due to its rough lava field terrain. Other than its roadless condition, it is similar to much of the surrounding countryside. It is common to many other areas in Northern California that have lava flows.



Timbered Crater Proposal
MAP-1

030-201
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface	17,896
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		199
Total		18,095
Within Recommended Wilderness Boundary		**Acres**
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within Area Not Recommended for Wilderness		**Acres**
BLM	(surface and subsurface)	17,896
Split Estate	(BLM surface only)	0
Total BLM Lands Not Recommended for Wilderness		17,896

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: This area is essentially natural in character due primarily to its harsh, rocky, and difficult to traverse terrain. The area is predominantly a lava flow with low ridges and depressions. There is a lot of exposed lava rock with very rough and uneven terrain. Some minor impacts detract from the natural appearance but are generally small in size and scattered around the WSA so that the overall impact on naturalness is negligible. There is an abandoned, flat, rock quarry in section 25, T. 39 N, R. 4 E. There are several short ways located in the WSA totaling approximately 5 miles in length. The longest one (2 miles) is in the southwest corner of the WSA. There has been some timber and firewood cut in the past around the perimeter of the WSA. A couple of firelines from past fires are also in the area, but are gradually disappearing through natural re-vegetation.

2. Solitude: The size of the area, the broken topography and the scattered brush and shrubs which provide screening, create opportunities for solitude in the WSA. Due to the rough terrain broken by the rough lava flows, few people visit the area. During hunting season the cherrystemmed roads that penetrate up to three miles into the WSA get some travel by hunters. During the

rest of the year only a few vehicles drive the cherrystemmed roads and ways. Timbered Crater, a low volcanic cone, is located just outside the WSA on its western boundary. Vehicles traveling around the road on its rim can be seen from most of the west side of the WSA. This is not a major distraction as there are usually only a few vehicles up there on a given day and several days could pass between visits to Timbered Crater.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The opportunities for primitive and unconfined recreation are limited in the WSA. Some hunting occurs but usually in association with the cherrystemmed roads and ways in the WSA. Due to the uneven, rough terrain with a lot of rough lava, most hunters do not get far from the roads and ways. There are no interesting destinations within the heart of the WSA. That with a lack of streams and springs does not provide a reason for people to hike in the rough, broken lava country. The Baker Cypress is located on the northern boundary of the WSA and is accessible by cherrystemmed road or way.

4. Special Features: The WSA contains the 1,148-acre Baker Cypress Natural Area. The Baker cypress (Cupressus bakeri), is a minor tree species with a distribution limited to a handful of sites in Northern California and Southern Oregon. It is not a threatened or Endangered Species, just a limited unusual species. The natural area is part of a 7,000-acre population which is the largest stand of Baker cypress to be found. The remainder of this stand is spread over adjacent private and Shasta Trinity National Forest lands. Smaller stands of Baker cypress are found scattered over the Sierra Cascade Mountain from Plumas County, California to Jackson County, Oregon. The trees are found on typically poorer soil such as basic igneous or serpentine soils. The Baker Cypress Natural Area was established to recognize the uniqueness of the species and preserve a portion of its habitat. It would also be available for any future scientific studies of the species.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 17,896 acres of the Sierren Forest/Western Ponderosa Forest ecosystem. This WSA is not exactly typical of this ecosystem as the majority of the WSA is comprised of lava flow. There is currently one existing unit

of this ecotype in the NWPS. There are two other BLM Wilderness Study Areas of this ecotype. There are two other units in the NWPS with similar lava formation. These are Lassen National Park and Lava Beds National Monument.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
NATIONWIDE				
Sierran Forest/Western Ponderosa Forest	1	815	2	21,754
CALIFORNIA				
Sierran Forest/Western Ponderosa Forest	1	815	2	21,754

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: This WSA is within a five-hour drive of six major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Sacramento	46	5,001,817	87	2,479,541
Redding	14	1,236,503	11	344,633
Chico	16	1,286,873	13	430,822
Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809
Oregon				
Medford	31	2,440,081	21	730,038

3. Balancing the geographic distribution of wilderness areas: There are six existing units of the National Wilderness Preservation System within 50 air miles of the Timbered Crater WSA. These

areas are Lassen National Park wilderness, Lava Beds N.M., Caribou and Thousand Lakes wilderness in Lassen National Forest and Castle Crags and Mt. Shasta Wilderness in the Shasta Trinity National Forest. There is one other recommended suitable BLM WSA within 50 air miles of Timbered Crater.

C. Manageability

The entire WSA is manageable as wilderness. The 199 acres of private lands within the WSA could potentially cause manageability problems. The private lands are owned by Roseburg Lumber Company as part of their larger land holdings in the surrounding area. The lands are being managed for timber production. A cherrystemmed road approximately two miles long provides access to the private parcels. To date there has not been much intensive forest management activity on these parcels. If an activity such as intensive harvest or a plantation were to take place in the future, it could detract from the area's wilderness characteristics. Roseburg Lumber Company could ask for an improvement of the access road at some future date.

Some irregularly-shaped sections on the east and south boundaries could present some boundary management problems, as they are long, narrow peninsulas jutting into private land.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: The Timbered Crater WSA is in the Alturas Resource Area. The U.S. Bureau of Mines and the U.S. Geological survey prepared a Mineral Land Assessment Report for the WSA (Peterson and Martin 1981). The report concludes that the area has little mineral potential except for flat lavas used in building construction. The geothermal potential of the area cannot be precisely determined except by further geological and geophysical study. However, the report considered the potential to be low.

   Past leasing activity was considered speculative as four of six geothermal lease applications and two of three oil and gas lease applications have either been terminated due to non-payment or were withdrawn by the applicant(s).

   Because of low potential for mineral resources, no mineral potential map was prepared for this WSA. Several permits for removal of flat rock were issued prior to 1970. Since this kind of material is readily available on private lands and the material available on public lands is limited and of low economic value, sale of flat rock from public lands was discontinued.

2. Summary of significant new mineral resource data collected since suitability recommendation which should be considered in the final recommendation: There has not been any significant new information that has come to the attention of the BLM since the EIS was written. All the geothermal lease applications have been relinquished and there are no geothermal leases now in the WSA. The last oil and gas lease was withdrawn by the applicant. There are no oil and gas lease applications in the WSA.

E. Impacts on Resources

TABLE 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Impact on Wilderness Values	The 20 percent of the area that is accessible to OHV would experience temporary disruptions of naturalness over much of its geographic extent from OHV use and such activities as timber harvesting, fuelwood harvesting, and the removal of flat lava rock. Within this area the disruption of naturalness would be relatively permanent on 10 acres per year from the removal of flat rock and would last about five years on an average of 25 acres per year from fuelwood and timber harvesting. Impacts on opportunities for solitude would be similar to those described for naturalness. Both naturalness and solitude would be preserved quite well on the 80 percent of the area that is inaccessible. Opportunities for primitive and unconfined recreation are limited in the WSA. They would re-	Wilderness values would be well protected under this alternative. Naturalness and opportunities for solitude would be reduced on less than 20 acres from wildlife guzzlers and development designated to prevent OHV use of the area. The limited existing opportunities for primitive and unconfined recreation would be retained and the special features of the WSA would be either unaffected or enhanced.	Under this alternative, wilderness values would be well protected on about 85 percent of the WSA. On the remaining 15 percent (the accessible portion of the area recommended nonsuitable) impacts on naturalness and opportunities for solitude would be similar to those described for the Proposed Action except that none of the impacts would last more than about five years because there would be no removal of flat lava rock. The limited opportunities for primitive and unconfined recreation would be diminished slightly by the activities affecting naturalness (timber harvest, fuelwood harvest, guzzler installation, etc.) but those who want primitive camping experience for example, could easily find it by avoiding disturbed areas.

Table 4 - Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Impact on Wilderness Values (Cont'd)	main available, however, for those willing to avoid the above-mentioned disturbances or hike into the parts of the WSA that are inaccessible to OHVs. The geology of the area would not be impacted. Impacts on the other special features-the Baker-Cypress stand and archaeological sites-would be as described below for those issues.		The geology of the area would not be impacted. Impacts on the other special features-Baker Cypress stand and archaeological sites-would be as described below for those issues.
Impacts on the Baker Cypress Stand	Less than 10 individual trees would be damaged or destroyed by OHVs annually. This would be more than counterbalanced by a relatively high level of fire protection.	There would be no damage from OHVs, but a lower level of fire protection. Acquisition of inholdings would increase the percentage of the stand that could be protected to about 16 percent.	Impacts would be the same as under the Proposed Action.
Impacts on Timber Harvesting	There would be one timber sale of about 200 Mbf every 10 years and, by the year 2000, a fuelwood harvest of about 100 cords per year. Although this could be significant to individual local residents, it would not be significant in terms of the local economy.	There would be no timber or fuelwood harvesting within the WSA.	Impacts would be the same as under the Proposed Action, except that the harvest every 10 years would be reduced by 25 percent to 150 Mfb.
Impacts on Recreational Use Levels	There would be a minor increase in recreational use to about 2,300 visitor days per year.	Reduced recreational use due to the prohibition of OHVs would be partially offset by the attraction of a designated wilderness & increased game bird populations. The net result would be a 25 percent decline in recreational use to about 1,600 visitor days per year.	Impacts would be the same as under the All Wilderness Alternative, except that because of only partial elimination of OHV use, recreational use would only decline 10 percent to about 2,000 visitor days per year.

Table 4 - Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Impact on Important Archaeological Sites	There would be moderate damage to at least one important archaeological site (known and unknown in the next 15 years), the largest threats being flat lava rock removal and OHV use.	The archaeological sites would be protected.	There would be negligible damage to one important but currently unknown archaeological site in the next 15 years. Known sites would be protected.
Impacts on Volume of Flat Lava Rock Removal	About 400 tons of flat lava rock would be removed each year. This would not be important to the local economy.	There would be no removal of flat lava rock from within the WSA	There would be no removal of flat lava rock from within the WSA.

F. Local Social and Economic Considerations

No local social or economic impacts of any significance were identified in the Final Environmental Impact Statement.

G. Summary of WSA - Specific Comments

Public involvement has occurred throughout the wilderness review process. During the inventory phase some comments addressed the natural characteristics of the unit. Others had information about the location and use of roads and private lands within the WSA. The presence of old firebreaks was also mentioned. All of this information was used in the EIS.

During formal public review of the draft Alturas RMP EIS, a total of 35 comments specifically addressing wilderness or this WSA were received. Of these, 31 were written and 4 were oral statements received at the public hearing held in Redding, CA on July 20, 1983. In general, 30 respondents supported wilderness designation for all or part of the WSA. Five respondents supported no-wilderness for the WSA.

Those favoring wilderness mentioned the need for more wilderness to be preserved in general. Some specific references to this WSA mentioned the outstanding natural values, Baker cypress, deer winter range and protecting archaeological sites as reasons for designating the area as wilderness. Those opposing wilderness stated that they felt the area did not have the quality that warranted designation and the area should be left open for the full range of uses including mining and woodcutting.

The Environmental Protection Agency (EPA), Soil Conservation Service (SCS) and State of California Resources Agency all commented on the draft EIS. The EPA mentioned that water quality discussion was minimal which we explained was due to the lack of any projected future uses of the area that would affect water quality. The SCS mentioned that soils information may be needed if erosion is a problem. The BLM responded by pointing out that there were no projected management actions that would cause erosion. The California Resources Agency mentioned that the Department of Parks and Recreation would eventually like to acquire 480 acres of land at the south end of the WSA under the Recreation and Public Purposes Act for addition to Ahjumawi-Lava Springs State Park. The BLM answered that this would be a possibility if Congress affirms this non-suitable recommendation.

No comments were received from the local governments.

Lava

CA-030-203

LAVA WILDERNESS STUDY AREA (WSA)

CA-030-203

1. THE STUDY AREA --- 10,770 acres

The Lava WSA is located in northeastern Shasta County, California one-half mile southeast of the town of Fall River Mills. The WSA includes 10,770 acres of BLM lands with no private or State inholdings. The mineral estate is entirely in public ownership (see Map 1 and Table 1).

The WSA is an irregularly-shaped polygon which takes on a generally square shape. From the northwest corner of the WSA near the town of Fall River Mills, the west boundary consists of a BLM/private land interface. This 6.5-mile-long boundary is from one-fourth to one mile east of the paved Six Mile Hill Road south of Fall River Mills. The western boundary proceeds south to its intersection with an east-west cindered road known as the Cinder Cone Access Road which comprises five miles of the eight-mile length of the southern boundary. The other three miles of the southern boundary is made up of a BLM/private land interface around an intervening section of private land which abuts the Cinder Cone Access Road. At the east boundary the Cinder Cone Access Road intersects the Pittville Road and the boundary proceeds north along this road for approximately one mile. From the Pittville Road the boundary becomes an unimproved dirt road for approximately one and one-half miles west then north to a private section of land (section 36). The boundary continues along this BLM/private land interface for approximately one and one-half miles and again rejoins the unimproved dirt road for one and one-quarter miles in the far northeast corner of the WSA. The northern 5-1/4 mile-long boundary is a BLM/private land interface.

The WSA consists of an old lava flow with a prominent butte at the southern end rising approximately five hundred feet above the general elevation of the surrounding terrain. The ground surface is rocky and broken with buttes and broad depressions formed as a result of the cooling of lava flows. Vegetation consists of Ceanothus, or buckbrush, manzanita, oak, juniper, Digger pine, and widely scattered Ponderosa pine.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and suitability recommendations were analyzed in the North Central California Wilderness Final Environmental Impact Statement. Two suitability recommendations were analyzed in the EIS: an all-wilderness and a no-wilderness alternative.

2. RECOMMENDATION AND RATIONALE -

0	acres recommended for wilderness
10,770	BLM acres recommended for non-wilderness

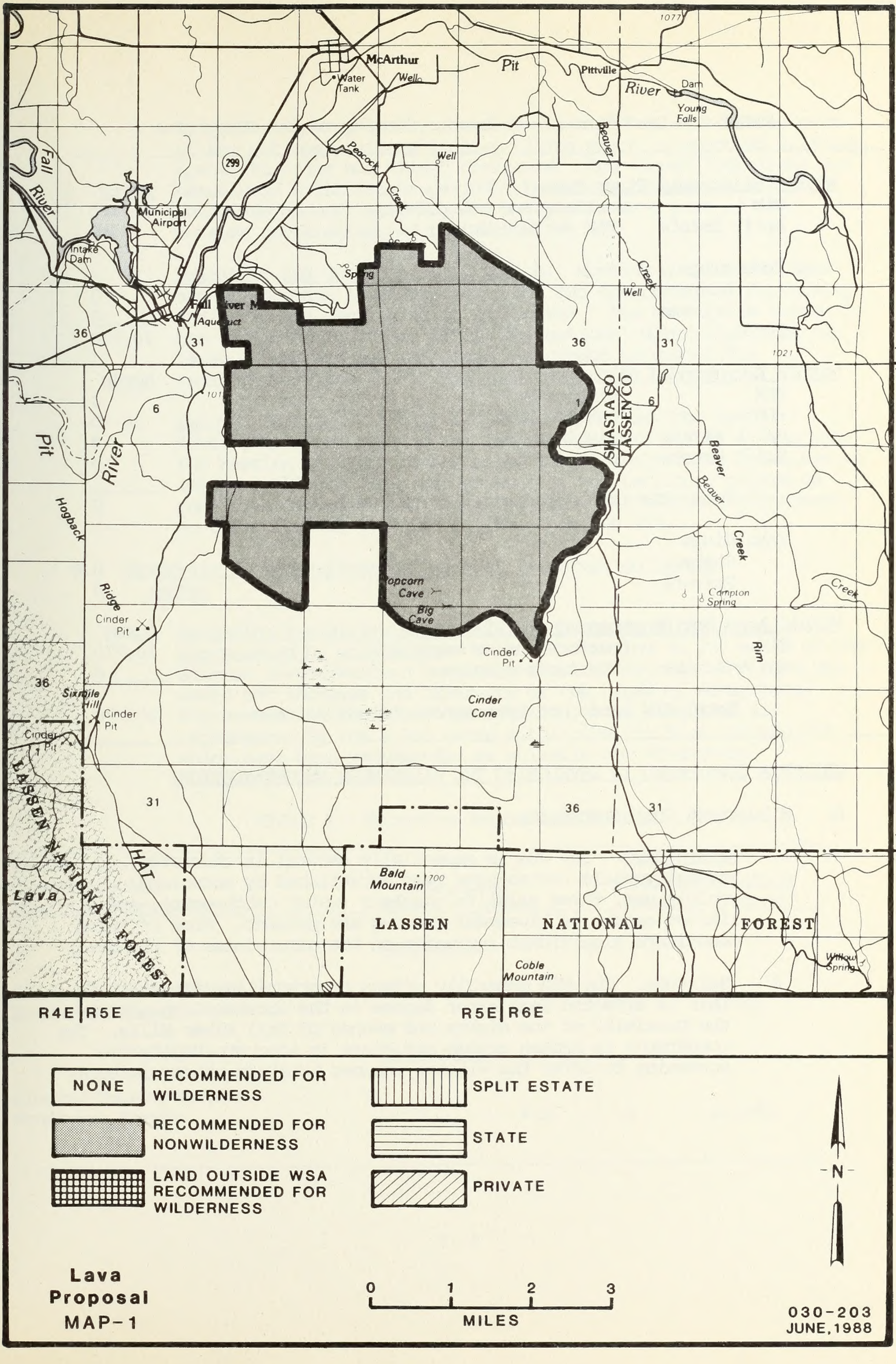
No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long term. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

Although the wilderness values of naturalness, solitude and primitive and unconfined recreation are present in the WSA, the values were not considered of high enough quality to warrant wilderness designation. The WSA does not contain any significant single feature or combination of features such as vegetation, topography, wildlife, geology, or cultural and historic features. The lava terrain and landforms are common to the area and are already represented in other designated wilderness, such as Lava Beds, Lassen National Park and Thousand Lakes in the Lassen National Forest. This area does not stand out from much of the surrounding area. The rough surface of the lava rocks has kept roads out, but other than its lack of roads it is very similar and in common with other nearby locations.

The WSA is mostly natural with the exception of minor fuelwood and vehicular impacts along the western boundary and is expected to remain in a relatively natural condition regardless of wilderness designation due to its ruggedness and natural inaccessibility.

Visitor use is low in the WSA with the exception of seasonal use for mule deer and upland game hunting opportunities. The low visitor use reflects the lack of variety and diversity of recreational opportunities as well as lack of special features. Most use occurs on the periphery of the area close to the access ways. There is no recreation use of the center of the WSA, as it contains no attraction or natural corridors such as stream channels or ridge lines. The rough, uneven broken volcanic rock inhibits hiking, demanding continual direction changes to avoid obstacles. There is approximately one mile of unmaintained way which will remain available for vehicular use.

Resource conflicts were not a factor in the non-suitable recommendation. The Bald Eagle Nest Territory is currently given protection by a resource management plan decision and a habitat management plan.



Lava Proposal
MAP-1

030-203
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	10,770
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		10,770
Within Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	10,770
Split Estate	(BLM surface only)	0
Total BLM Lands Not Recommended for Wilderness		10,770

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA is essentially natural in character. Several vehicle routes have been established by occasional vehicle use, three wildlife guzzlers (water catchments), and a limited amount of livestock fencing are present. None of these constitute significant intrusion on the naturalness of the area.

2. Solitude: The WSA generally offers opportunities for solitude. This is affected to a minor degree in the northwestern part by the proximity of the sights and sounds of Fall River Mills. The topography is broken enough and there is adequate vegetative screening to offer the visitor chances to avoid other visitors.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Hunting quality for deer and upland game is relatively high, and opportunities for hiking and primitive camping exist in the WSA. The terrain is common to the region and provides little recreational diversity. The low level of current use indicates the common nature of the recreation values.

4. Special Features: A bald eagle nest territory has been historically occupied in the far northwestern corner of the WSA. The nesting pair has occasionally moved to alternate nestsites on adjacent private lands though most of the territory occurs on public lands. The bald eagle is listed as Federally endangered. No other special features exist within the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 10,770 acres of the Sierran Forest/Western Ponderosa forest ecosystem. The Lava WSA would not increase the diversity of the types of ecosystems represented in the NWPS. In addition, this ecosystem is represented by the 6,703 acres within the Pit River Canyon WSA which have been recommended as suitable for wilderness designation.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	Nationwide			
Sierran Forest/Western Ponderosa Forest	1	815	2	28,880
	California			
Sierran Forest/Western Ponderosa Forest	1	815	2	28,880

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of six major metropolitan areas. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Sacramento	46	5,001,817	87	2,479,541
Redding	14	1,236,503	11	344,633
Chico	16	1,286,873	13	430,822
Yuba City	44	4,951,805	85	2,459,500
Oregon				
Medford	31	2,440,081	21	730,038
Nevada				
Reno	39	4,647,230	175	6,904,809

3. Balancing the geographic distribution of wilderness areas: There are five existing units of the National Wilderness Preservation System within 50 air miles of the Lava WSA. These include four U.S. Forest Service units: Mt. Shasta, Castle Crags, Thousand Lakes, and Caribou; and one National Park Service unit; Lassen Volcanic. There are two other recommended suitable BLM WSA's within 50 air miles of Lava WSA: Pit River Canyon and Tunnison Mountain.

C. Manageability

The Lava WSA is manageable as wilderness, although some management problems do exist. The proximity of the town of Fall River Mills to the northwest corner of the WSA adversely affects the management for the wilderness characteristic of solitude. Privately owned lands between the Six Mile Hill Road and the west boundary of the WSA are subdivided and contain numerous residences. Trespass woodcutting, noise, litter, fire hazard, and other problems associated with constant human presence could adversely affect management for wilderness characteristics adjacent to this area.

The majority of the WSA is generally inaccessible to motor vehicles and unsuitable for other nonconforming uses which would impair management for wilderness characteristics.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: A mineral resource report (Rogers 1982) reports negligible mineral potential except for volcanic cinders and lava rock used in construction and for decorative purposes. The true geothermal potential of the area cannot be determined except by further geologic and geophysical study. The entire study area has been classified by the U.S. Minerals Management Service as "prospectively valuable for geothermal steam and associated geothermal resources." The geothermal resource potential is considered to be low. The Minerals Management Service has further determined that "the lands are without value for other leasable minerals."

   No known mining activity has occurred within the WSA. The 1977 Bureau of Mines MILS data show no mines or prospects within the WSA.

   Two noncompetitive oil and gas leases (3,640 acres) have been issued in the northernmost and southernmost portions of the WSA.

   Five cinder cones are present in the subject area. The major uses for volcanic cinders are for road-base construction and lightweight concrete aggregate. Minor uses include decorative landscaping and cindering of roads during the winter. Sources of cinders are abundant in this region, both on private and Federal lands. The lava rock in the WSA could theoretically be utilized for decorative or building purposes. There are, however, no indications that any of the stone in the WSA has been used for these purposes. Flat lava rock, which is considered especially valuable for building construction, does not occur in concentrated quantities in the study area.

2. Summary of significant new mineral resource data collected since the suitability recommendation which should be considered in the final recommendation: Since the area was recommended as non-suitable for wilderness designation there were no mineral surveys conducted by the U.S. Bureau of Mines and/or the U.S. Geological Survey. The current status of the two non-competitive oil and gas leases is that they have been terminated due to nonpayment. There is one placer mining claim which is mostly outside the WSA with a narrow band extending into the southwest corner of the WSA. No exploration or development activity has occurred within the WSA. A cinder pit exists on that portion of the claim located south of the road, and outside the WSA. Interest in mineral exploration is indicated by the following BLM mining claim record data, as of March 25, 1988 (see Table 4).

Table 4 - Mining Claims

TYPE	NO. SUITABLE	NONSUIT.	TOTAL	ACRES SUITABLE	NONSUIT.	TOTAL
Lode	0	0	0	0	0	0
Placer	0	1	1	0	40	40
Mill Sites	0	0	0	0	0	0
Total	0	1	1	0	40	40

E. Impacts on Resources

Table 5 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	The 10 percent of the area that is accessible to OHV would experience temporary disruptions of naturalness over much of its geographic extent from OHV use and such activities as timber harvesting, fuelwood harvesting, and the removal of flat lava rock. Within this area, the disruption of naturalness would be relatively permanent on 10 acres per year from the removal of flat lava rock and would last about five years on an average of 20 acres per year from fuelwood and timber harvesting. Impacts on opportunities for solitude would be similar to those described for naturalness and solitude would be preserved quite well on the 90 percent of the area that is inaccessible. Opportunities for primitive and unconfined recreation in the WSA would remain available for those willing to avoid the above mentioned	Wilderness values would be well protected under this alternative. Naturalness and opportunities for solitude would be reduced on less than 15 acres from development designed to prevent OHV use of the area. The limited existing opportunities for primitive and unconfined recreation would be retained and the special features of the WSA would be either unaffected or enhanced.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE
Impacts on Wilderness Values (Cont'd)	disturbances or hike into the parts of the WSA that are inaccessible to OHVs. The geology of the area would not be impacted. Impacts on the other special feature—the bald eagle nest site—would be as described below for that issue.	
Impacts on Nesting Success of Bald Eagles	It is predicted that the eagle nesting site will regain its productivity within three years. Management actions such as timber and fuelwood harvesting, prescribed burning, flat lava rock removal, limited OHV use, and powerline construction would have only neglibible impacts on the eagles.	It is predicted that the eagle nesting would regain its productivity within three years.
Impacts on Mule Deer Population Levels	Winter and fall deer populations within the WSA would increase by from two to five percent (to a maximum of 620 and 520 deer, respectively) over the next 20 years because of planned vegetation manipulations.	Fall deer population levels within the WSA would remain at 200 to 500 animals, the winter population would remain at 300 to 600.
Impacts on Recreational Use Levels	Recreation use levels would remain at about 8,700 visitor days per year.	Recreational use levels would decrease to about 7,500 visitor days per year because of the OHV prohibition which would be only partially offset by the increased attraction of wilderness designation and the eagles.
Impacts on Timber Harvesting	There would be one timber sale of about 1.0 MMbf every 20 years and a fuelwood harvest of about 75 cords per year. Although this could be	There would be no timber or fuelwood harvesting within the WSA.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION NO-WILDERNESS/NO ACTION	ALL-WILDERNESS ALTERNATIVE
Impacts on Timber Harvesting (Cont'd)	significant to individual local residents, it would not be significant in terms of the local economy.	
Impacts on the Volume of Flat Lava Rock Removed	About 75 tons of flat lava rock would be removed each year. This would not be important to the local economy.	There would be no removal of flat lava rock from within the WSA.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final Environmental Impact Statement. Therefore no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Comments

1. Inventory phase: A total of seven written comments were received during the inventory phase. One supported the recommendation of the area as a WSA, three comments applied to study phase considerations, and three provided inventory information which had been previously considered during the inventory.

2. Study phase: The Notice of Intent to conduct the wilderness study was published in the Federal Register on December 17, 1980. The public was also notified through media releases in local and regional newspapers and through letters to individuals and organizations on the District's mailing list.

   Following this announcement, over 700 planning newsletters and 300 copies of the Planning Criteria Document were sent to the public at large requesting comments, concerns, and identification of known management problems and opportunities. In addition to public involvement during the planning process, a scoping announcement was published in the Federal Register on September 30, 1981.

   The Draft Environmental Impact Statement was filed with the Environmental Protection Agency in May 1983, and mailed to interested organizations and individuals. A Notice of Availability appeared in the Federal Register, No. 48, No. 108 on June 3, 1983, establishing a 90-day public review period.

During the public comment period (June 3 to September 6, 1983) one formal hearing was conducted to solicit public advice and comments regarding the proposed action and alternatives.

Thirty-one written comments were received and four individuals testified at the public hearing. The Atlantic Richfield Company, Fall River Big Valley Cattlemen's Association, California Mining Association, The Minerals Exploration Coalition, and Pacific Gas and Electric Company were organizations providing written comments supporting a non-wilderness designation. The Sierra Club, California Wilderness Coalition, the Wilderness Society, and the Northeast Californians for Wilderness presented oral testimony, all of which favored a wilderness designation.

The Environmental Protection Agency (EPA), Soil Conservation Service (SCS) and the State of California Resources Agency all commented on the draft EIS. The EPA mentioned that water quality discussion was minimal which we explained was due to the lack of any projected future uses of the area that would affect water quality. The SCS mentioned that soils information may be needed if erosion is a problem. We responded by pointing out that there were no projected management actions that would cause erosion. The California Resources Agency mentioned that endangered and sensitive wildlife species such as the Bald Eagle should be protected from OHV use. The BLM responded that the nest site is already protected from OHV use by a RMP management action with or without wilderness.

No comments were received from local governments.

Yolla Bolly Contiguous

CA-030-501

YOLLA BOLLY WILDERNESS STUDY AREA (WSA)

(CA-030-501)

1. THE STUDY AREA --- 646 Acres

The Yolla Bolly WSA is located in Tehama County, California, approximately 40 miles west of Red Bluff. The WSA includes 646 acres of Bureau of Land Management (BLM) land. There are no private or State inholdings (see Map 1 and Table 1).

The WSA is bounded on the north and west by the Mendocino National Forest (USFS) (the west boundary of the WSA ajoins the Yolla Bolly-Middle Eel Wilderness) and on the east and south by private property.

The WSA comprises one section of land, sloping sharply to the east into the Cottonwood Creek drainage. The WSA is generally brush-covered with scattered oak and digger pine. Due to its steep slopes, southern aspect, and lack of water, there is little wildlife.

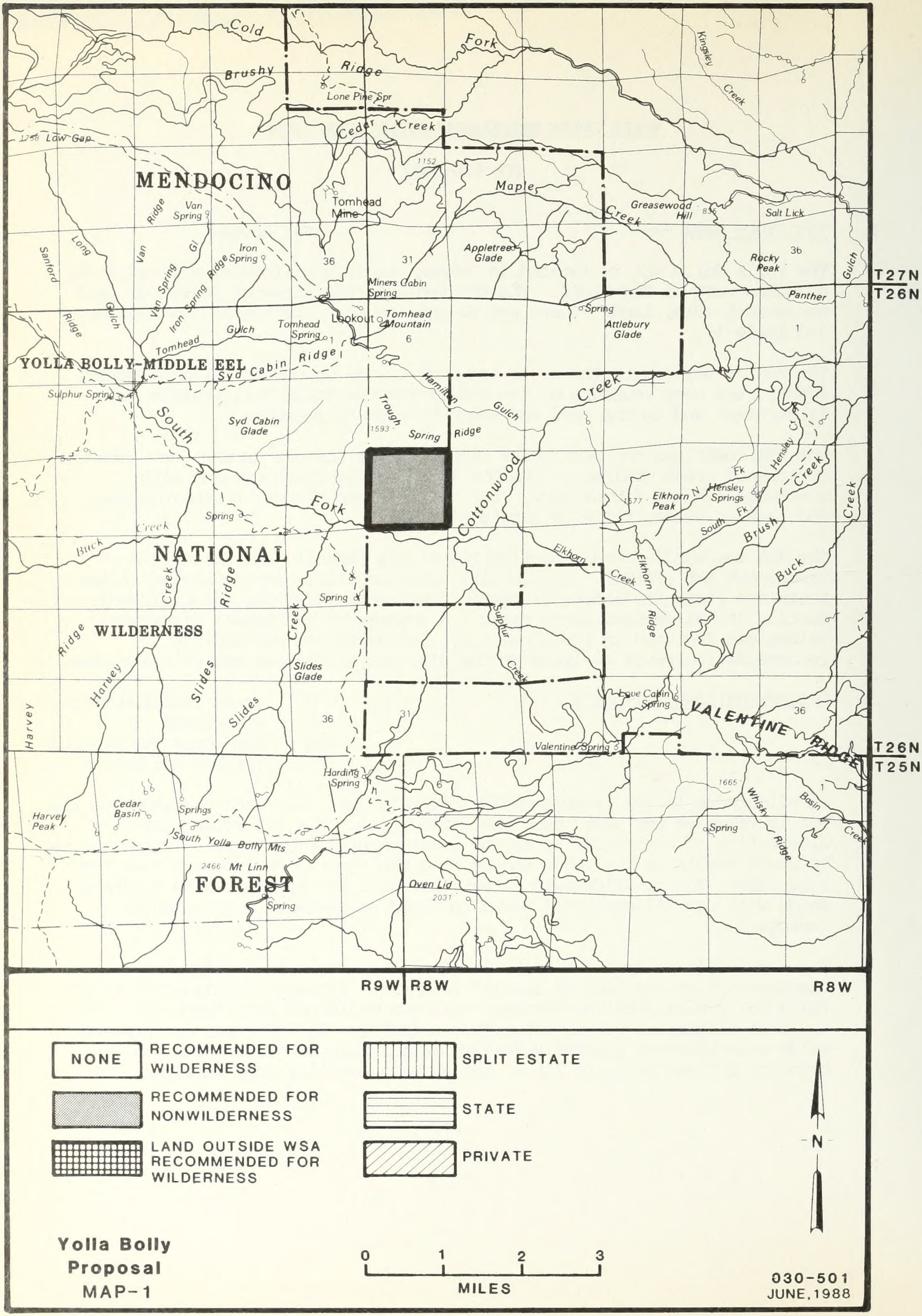
The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). Suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EIS) for the California Section 202 Wilderness Study Areas. A summary of the area's wilderness values was included in the final EIS. Two different suitability recommendations were analyzed in the EIS: all wilderness and no wilderness.

2. RECOMMENDATIONS/RATIONALE

0	acres recommended for wilderness
646	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in the WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally-preferred alternative as it would result in the least change from the natural environment over the long term. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The unsuitable recommendation is based on the area's low wilderness quality characteristics and lack of special features. Although contiguous with the Yolla Bolly-Middle Eel Wilderness, this WSA would not compliment the National Wilderness Preservation System (NWPS). In addition, the present wilderness boundary generally follows topographic features. The WSA boundary follows property lines, making manageability more difficult.



Yolla Bolly Proposal
MAP-1

030-501
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	646
Split Estate	(BLM surface only)	
Inholdings		
State		0
Private		0
Total		646
Within the Recommended Wilderness Area		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	646
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		646

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The area shows little of man's presence. The only exception is a fuelbreak constructed in 1976 during a wildfire which has largely grown back. There has been no mining in the area.

2. Solitude: The WSA's small size provides limited opportunity for solitude unless considered in conjunction with the USFS Yolla Bolly-Middle Eel Wilderness west of the area. The lack of roads and motorized vehicle activity allows for undisturbed use. The

area is generally brush-covered making foot access difficult. There are no surrounding developments or activities that would detract from the feeling of solitude. While solitude is available, it is not considered to be outstanding.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The area offers traditional kinds of primitive recreational experience, but these are not outstanding when compared to like areas. There is little in the area to induce the average user to spend much time. There is no permanent water source and the area's landscape offers no diversity.

4. Special Features: The area has no special features.

B. Diversity in the National Wilderness Reservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 646 acres of the California Chaparral/Chaparral ecosystem. The Yolla Bolly WSA would not increase the diversity of the types of ecosystems in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
NATIONWIDE				
Calif. Chaparral/ Chaparral	17	462,256	10	86,564
CALIFORNIA				
Calif. Chaparral/ Chaparral	17	462,256	10	86,564

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of two major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Chico	16	1,286,873	13	430,822
Redding	14	1,236,503	11	344,633

3. Balancing the geographic distribution of wilderness areas: There are no other BLM WSAs within 50 air miles recommended for wilderness designation. The Yolla Bolly-Middle Eel Wilderness abuts the WSA on the west, and the Yolla Bolly-Middle Eel North Fork Wilderness is approximately 30 miles to the west, both administered by the USFS.

C. Manageability

The Yolla Bolly WSA is manageable as wilderness. There is one fuel break constructed during a 1976 wildfire. While this fuel break is naturally revegetating, occasional trespass by motorcycles can be expected. There is no grazing within the WSA and none is expected in the future. The area is remote and little use is expected.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary nonsuitability recommendations: The energy and mineral potential of the Yolla Bolly WSA is addressed in the California Section 202 Wilderness Study Areas EIS. Due to the fact that the WSA was deemed nonsuitable in the EIS, no BLM Geology-Energy-Minerals (G-E-M) report was prepared. In lieu of a G-E-M report, a literature search was made to verify the findings of the EIS.

   The geology, mineralization and lack of mineral development in this area indicate a low potential for mineral resources. Geology of this section has been mapped as the Yolla Bolly and Pickett Peak Terranes of the Franciscan assemblage of the northern Coast Range geologic province. There is no evidence of any significant mineral deposits, geothermal, or oil and gas resources in the WSA. There has been no known exploration, development or production of mineral resources from within the WSA. The U.S. Geological Survey does not classify this land as being perspectively valuable for any leasable mineral.

2. Summary of significant new mineral resource data collected since the nonsuitability recommendation which should be considered in the final recommendation: There were no mineral surveys conducted by the U.S. Bureau of Mines or the U.S. Geological Survey. As of January 13, 1988, BLM mining claim records indicated that there were no mining claims recorded in the WSA. As of February 12, 1988 there were no geothermal or oil and gas leases or applications within the WSA. There are no known saleable mineral deposits in the WSA. Due to the low potentil for occurance or development no mineral resource potential map was prepared for this WSA.

E. Impacts on Resources

The following table summarizes the affects on pertinent resources for all alternatives considered.

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	There are no planned management actions or projected surface-disturbing activities within the WSA. Therefore, no impacts on wilderness values are anticipated.	The WSA would receive long-term, legislative protection that would maintain the wilderness values. There are no planned management actions or projected surface-disturbing activities within the WSA. Therefore, no impacts to the WSA's wilderness values are anticipated.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Several comments were received during the inventory phase, stressing the area's naturalness.

During the study phase, a public hearing was held in Ukiah, California on December 2, 1987. One issue was identified during the oral and written comments stage - the impact on wilderness values.

The U.S. Forest Service concurred with the Bureau's no-wilderness recommendation. No comments were received from local governments.

Chemise Mountain

CA-050-111

CHEMISE MOUNTAIN WILDERNESS STUDY AREA (WSA)

(CA-050-111)

1. THE STUDY AREA --- 4,483 acres

The Chemise Mountain WSA is located on the coastline, both north and south of the Humboldt-Mendocino County line within the King Range National Conservation Area. The nearest cities are Ferndale, forty air miles north, Fort Bragg, forty air miles south, Garberville, ten air miles east, and Shelter Cove, immediately north of the WSA. The San Francisco Bay Area is located approximately 170 air miles to the south. The study area contains 4,143 acres of BLM land, 243 acres of State land, 97 acres of private property, and no split estate inholdings (see Map 1 and Table 1).

The WSA's southern boundary is adjacent to the Sinkyone Wilderness State Park. The eastern boundary is Whale Gulch Creek, Chemise Mountain Road, and private property. The northern portion of the WSA is bounded by private land and Chemise Mountain Road, and the western boundary is the Pacific Ocean and private property.

The topography is steep and rugged. Elevation drops 2,600 feet to the ocean over about one-half mile. Major drainages are Whale Gulch Creek and Chemise Creek; both drain into the Pacific Ocean. The western slope is extremely steep with Douglas-fir growing in the drainages and chaparral on the saddles and ridges. There are also several open grassy meadows; the largest, named Hidden Valley, is nearly 35 acres in size.

In 1970, the U.S. Congress established the King Range National Conservation Area, which contains this WSA and the 34,031-acre King Range WSA (CA-050-112). In 1975, the BLM State Director designated 3,941 acres as the Chemise Mountain WSA a primitive area. Management direction is to provide opportunities for primitive recreation and protect outstanding scenic values. Nearly ten miles of hiking and horseback riding trails in the WSA are designated a part of the National Recreation Trails System. The California State Water Resources Control Board designated the intertidal zone of the WSA's shoreline an Area of Special Biological Significance. The purpose of this special designation is to protect biological communities of such extraordinary value that no acceptable risk of change in their environments, as a result of man's activities, can be entertained.

As a consequence of establishing the Chemise Mountain Primitive Area, it was automatically subject to wilderness review as mandated by Section 603 of the Federal Land Policy and Management Act (FLPMA) and labeled an Instant Study Area (ISA). Although the Chemise Mountain ISA did not contain 5,000 acres, it was decided during intensive wilderness inventory that the ISA together with the contiguous land was of sufficient size to make practicable its preservation and use in an unimpaired condition. The additional 542 acres adjacent to, but outside the ISA boundary, were included in the wilderness study process as authorized in Section 202 of FLPMA. A forty-acre parcel inside the ISA boundary was acquired by BLM in 1985 and was also studied under Section 202.

Two suitability recommendations were analyzed in the Draft EIS. A partial-wilderness recommendation was considered but dropped from further analysis because the Chemise Mountain WSA's size and lack of resource conflicts made such an alternative impractical and unnecessary. The Final EIS analyzed the same two suitability recommendations: no wilderness (the District Advisory Council recommendation) and all wilderness.

2. RECOMMENDATION AND RATIONALE

4,143	acres recommended for wilderness
0	BLM acres recommended for non-wilderness

All wilderness is the recommendation for this WSA. This is considered to be the environmentally-preferable alternative as it would result in the least change to the natural environment over the long-term. In all, a total of 4,143 acres are recommended for inclusion in the National Wilderness Preservation System (NWPS).

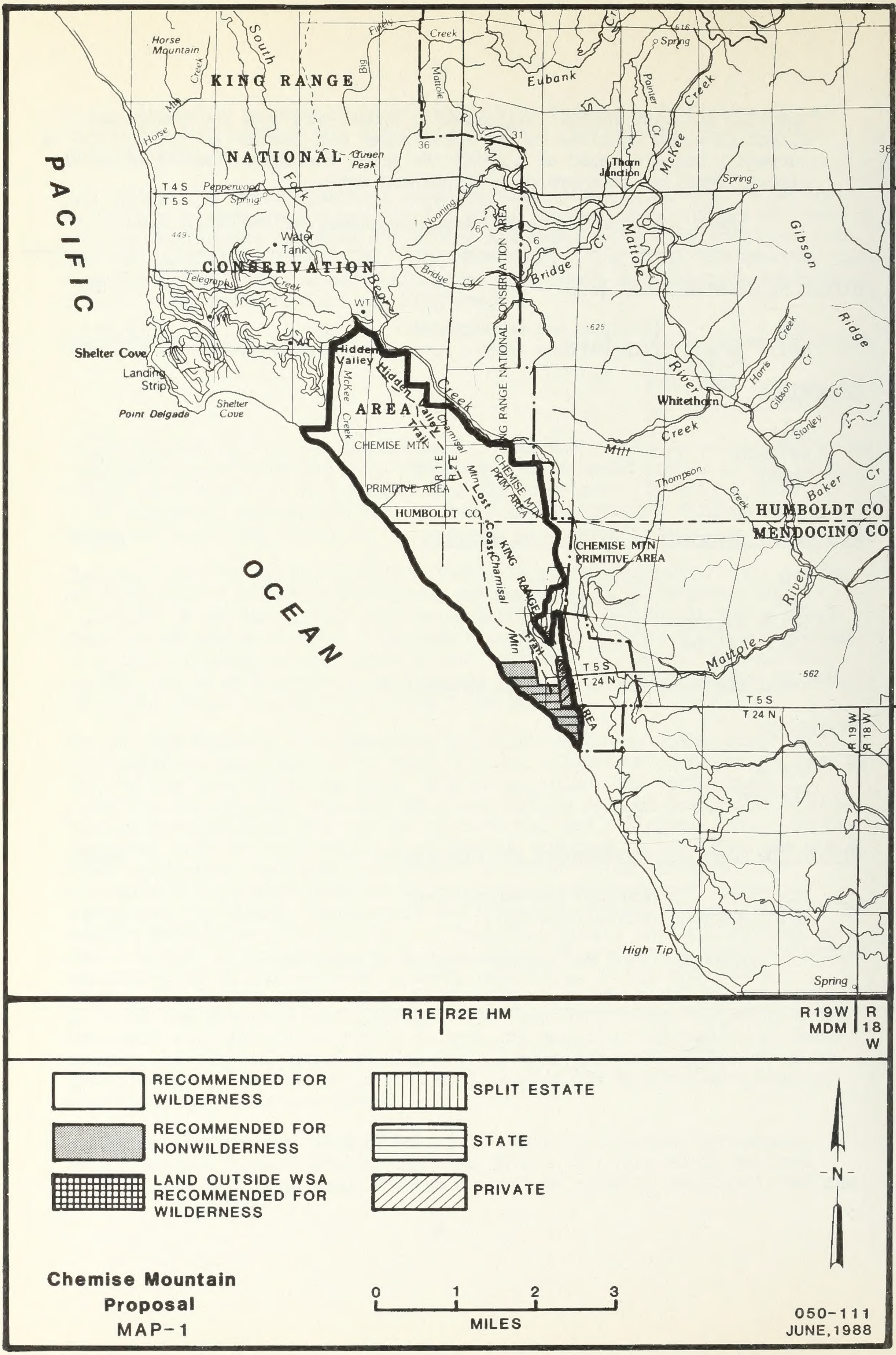
The rationale for selecting this all-wilderness recommendation is: 1) the area contains outstanding wilderness values and special features; 2) inclusion of the WSA in the NWPS would provide an opportunity for a broad spectrum of people to have wilderness experiences because of its convenient location; 3) there are no resource conflicts with wilderness designation; 4) the area is manageable as wilderness; 5) wilderness designation of this WSA would expand the diversity within the NWPS.

The WSA has retained an outstanding primitive character which exemplifies the qualities described in the definition of wilderness contained in Section 2(c) of the 1964 Wilderness Act. The western slope and north-south ridgeline near Chemise Mountain show very little sign of being disturbed by man and have retained their primeval character and influence. The area has recovered from the substantial impacts that occurred in 1973 from the use of heavy mechanical equipment to suppress an uncontrolled wildfire. An extensive trail system provides an outstanding challenge and unique experience for hikers, backpackers and horseback riders. Travel through the complex variations of vegetation and terrain requires physical stamina and coordination, and competence with good judgement. Visitors have outstanding opportunities to find secluded places, especially in the old-growth Douglas-fir forests next to the WSA's southern boundary and in the inner gorge of the western slope drainages. The new north-south ridgeline trail extension will add significantly to both the quantity and quality of back-country recreational opportunities because this BLM trail will link up to the Sinkyone Wilderness State Park trail system and double the mileage of uninterrupted wilderness travel.

Wilderness designation of this WSA would complement current management objectives and planned actions outlined in the 1974 King Range National Conservation Area Management Program as well as recently developed resource specific activity plans. All existing short-term uses and management direction would continue in the same manner and degree because the WSA is currently being managed as a primitive area; the objectives of which are almost identical to those of a wilderness area.

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	4,143
Split Estate	(BLM surface only)	0
Inholdings		
State		243
Private		97
Total		4,483
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	4,143
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		4,143
Inholdings		
State		
Private		
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	0
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		0



Chemise Mountain Proposal

MAP-1

050-111
JUNE, 1988

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA retains its natural appearance. The rugged topography in combination with diverse vegetation creates a primeval environment. Man's imprint on the landscape of the WSA is noticeable for approximately a mile along the north-south ridge and along a few east-west trending ridges due to the construction of firebreaks in 1973. Overall, these intrusions are substantially unnoticeable because rapid revegetation has occurred. Within a decade it will be difficult to tell whether mechanical equipment was ever used for fire suppression in this WSA. Approximately twenty acres in the northern portion of the area were logged about twenty years ago, but the screening from thick vegetation substantially diminishes the impact from this intrusion. Hiking and horseback trails have been constructed throughout the area, and these developments enhance man's use and enjoyment of the WSA without degrading its natural condition.

2. Solitude: The steep canyons and ocean beaches provide outstanding opportunities for solitude. Visitors can experience both the intimacy of small, steep, narrow drainages and canyons and the vastness and great expanse of the ocean. Views of the Pacific Ocean and to the south into the Sinkyone Wilderness State Park enhance opportunities to experience both solitude and spaciousness.

   Visitation to this WSA is moderate at present, and anticipated to increase about ten percent per year for the next fifteen years. Recent trail extensions and new trail development will allow visitors to disperse into more remote areas, thus creating greater opportunities for solitude.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Outstanding opportunities for primitive and unconfined types of recreation exist in this WSA, due to the diversity in the number of activities and because several of them have outstanding qualities when considered alone. Examples of these primitive and unconfined types of recreational activities are: hiking, backpacking, camping, fishing, hunting, horseback riding, photography, bird watching, and sightseeing for botanical, zoological, or geological features. The new trail extension along the ridge south of Chemise Mountain would substantially increase overall visitor use because the trail would disperse hikers toward the Sinkyone Wilderness State Park.

4. Special Features: Scenic qualities are outstanding in this area. The abrupt rise of topography is rarely surpassed on California's rugged coast and is seldom found in other parts of the world. Viewing the natural landscape as it meets the ocean is a unique experience for most users since there are few coastal lands left undeveloped in California. Rare animals such as the California Brown Pelican and bald eagle are known to visit the area. Recent intensive archaeological surveys have located several important cultural sites within and near the WSA. These sites may be significant enough to be eligible for nomination to the National Register of Historic Places. The Roosevelt Elk is being reintroduced in this area.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 4,143 acres of the Pacific Forest/Mixed Evergreen ecosystem. Addition of this WSA would expand the diversity within the NWPS because there are currently no coastal wilderness areas composed of mixed evergreen forests combined with a coastal prairie-scrub mosaic. The area is one of the few remaining extensive stretches of unroaded coastline in the United States that offer outstanding opportunities for a superior backpacking experience.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
NATIONWIDE				
Pacific Forest/California Mixed Evergreen	5	433,107	2	36,532
CALIFORNIA				
Pacific Forest/California Mixed Evergreen	4	45,074	2	36,532

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of two major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	acres	Other BLM Studies areas	acres
California				
Redding	14	1,236,503	11	344,633
Santa Rosa-Petaluma	10	888,579	12	134,167

3. Balancing the geographic distribution of wilderness areas: There are two designated wilderness areas within fifty air miles of this WSA. They include the Yolla Bolly-Middle Eel Wilderness and the North Fork Wilderness, both managed by the Forest Service. The King Range WSA lies two miles to the north and is recommended for 63% partial-wilderness.

C. Manageability

The entire WSA is manageable as wilderness. There are no resource conflicts or nonconforming uses within the Chemise Mountain WSA that would have an impact on preserving the area's wilderness character. The WSA could be managed as wilderness over the long-term based on present knowledge of the resources and potential visitor use.

Manageability is enhanced because the WSA's boundary is clearly defined by physical features: the Pacific Ocean, Whale Gulch Creek, Chemise Mountain Road and Shelter Cove Road.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: The geology and mineralization of the Chemise Mountain WSA is described in the Unit Resource Analysis (URA) based on data in Mineral Resource Inventory (MRI) files for the BLM East Mendocino Planning Unit. The MRI data in the Affected Environment section of the Chemise Mountain Wilderness Final EIS of 1988 indicated that the WSA has a low potential for the occurrence of energy-related and metallic mineral resources. There are no patented or unpatented mining claims in the WSA. No oil and gas seeps or coal seams were detected in the WSA. The geothermal resource potential of the area is also low. No mineral material sites exist in the area, nor are there any sodium or potassium leases. The WSA has a low potential for the occurrence of uranium, thorium and nonmetallic mineral resources.

Minor manganese resources occur two miles outside the WSA near Queen's Peak. Fourteen lode claims were filed for this site in 1982. The known deposits are too small and the manganese too low in concentration for further economic exploitation. Similar manganese mineralization may be within the belt of melange that extends into the WSA, but economic deposits are unlikely.

Although there has been historical exploration of both base and precious metals north of the WSA in the Mattole River drainage, geologic and geochemical field data indicate almost no gold potential and low potentials for lead, zinc, copper, and silver. One high-grade vein and several minor veins containing lead, zinc, copper and silver were discovered at Shelter Cove, less than two air miles northwest of the WSA.

The WSA was identified by the California Energy Commission as having limited potential for wind energy development. There are no leases at the present time. The area is unlikely to be considered a prime resource for development in the near future due to the limited geographic extent of the resource and geographic isolation.

2. Summary of significant new mineral resource data collected since the nonsuitability recommendation, which should be considered in the final recommendation: The Chemise Mountain WSA became an Instant Study Area as mandated by section 603 of FLPMA and as such was the subject of a mineral survey by the U.S. Bureau of Mines and U.S. Geological Survey. The results of the mineral survey were published in 1980 (MF 1196 A-C and Open File Report 80-815) and included in BLM's preliminary analysis and recommendations.

E. Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered, including designation or nondesignation of the entire WSA as wilderness.

TABLE 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Impact on Wilderness Values	The area's wilderness values would be retained.	The area's Primitive Area designation would be maintained and it's wilderness values retained.
Impact on Reintroduction and Management of Roosevelt Elk	Impact on the reintroduction of elk would be negligible. A minor positive impact from prescribed burning would be partially offset by minor disturbance to elk resulting from increased visitor use to the area.	Impacts would be the same as that for the Proposed Action.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain comments received during the Inventory and Study Phases, and in the Draft EIS were used to develop significant issue topics, various alternatives and finally, to recommend that the entire WSA be designated a wilderness area.

A total of 515 written and oral comments were received during the formal public review period. Over 90 percent of the comments supported wilderness designation of this WSA. Only seven commenters recommended no-wilderness. The most frequently mentioned item of concern was the need to protect the natural values of the few remaining roadless areas adjacent to the Pacific Ocean. Fifty letters identified the Sinkyone Wilderness State Park as an important factor in justifying why the Chemise Mountain WSA should be designated wilderness. Several respondents argued that BLM should not equate administrative protection of the area because of its Primitive Area designation with Congressional designation as a wilderness area.

Resource management issues mentioned most often were: wildlife (40 percent); fisheries (26 percent); and vehicle access (44 percent). Less than five percent of the total number of comments received identified any need for a more detailed analysis of the environmental impacts on the WSA's resource values.

The Ukiah District Advisory Council appointed a Technical Review Team to study wilderness issues in detail because of the many concerns and controversies expressed by the general public, special interest groups and government agencies. The Council, after reviewing the TRT's report, recommended that the WSA not be designated a wilderness area.

The U.S. Environmental Protection Agency classified the Draft EIS as category LO, Lack of Objections. Concern about mineral resources was expressed by the U.S. Bureau of Mines. They emphasized that mineral deposits of economic value may be found in areas of low potential. The U.S. Dept. of Air Force is generally supportive of wilderness designation provided that no restrictions are placed on essential military overflights. The major concern expressed by the U.S. Fish and Wildlife Service was the assurance that salmon and steelhead habitat on the west-slope coastal streams be protected.

California Assemblyman Dan Hauser had no comment on this WSA. The California Coastal Commission said BLM should prepare and submit a consistency determination for those actions specified in the EIS which may have a direct effect on the coastal zone. The potential for developing wind energy under wilderness was a concern of the California Energy Commission. The California Department of Forestry and Fire Protection was concerned about its firefighting capabilities and limitations in areas recommended for wilderness designation, especially when residential communities are located nearby. The safety of these residents could be compromised by BLM's restrictions placed on the use of mechanical equipment. The Humboldt County Board of Supervisors supported the wilderness alternative, and expressed the need to allow firefighting techniques that prevent the spread of uncontrolled fires into nearby communities such as Shelter Cove and Whale Gulch.

King Range

CA-050-112

KING RANGE WILDERNESS STUDY AREA (WSA)

(CA-050-112)

1. THE STUDY AREA --- 34,033 acres

The King Range WSA is located on the southern coast of Humboldt County, California within the King Range National Conservation Area (see Map 1). The nearest cities are Ferndale, 25 miles to the north, Fort Bragg, 45 miles to the south, and Garberville, 10 miles to the east. The San Francisco Bay Area is approximately 175 miles to the south. The study area contains 33,485 acres of BLM land, and 548 acres of private inholdings (see Table 1).

The western boundary follows the mean high tide line of the Pacific Ocean. The southern boundary is formed by Kaluna Cliff Road, just north of the community of Shelter Cove. Heading north along the main ridgeline, the WSA boundary follows Horse Mountain Road for four miles and Saddle Mountain Road for three miles. It then drops downhill on the eastern slope along Horse Pasture Ridge Road and parallels the first seven miles of the King Range Road. The boundary is located on Bearwallow Ridge, paralleling the King Range Road a half-mile to the east. From Bearwallow Ridge, the boundary line extends downhill into Honeydew Creek and ties in with the Smith-Etter Road. Heading westerly along the Smith-Etter Road for three miles, the boundary then makes a northerly turn along Fiddle Prairie, Moorehead Ridge and Cooskie Ridge. It follows the Cooskie Creek Road for its full five-mile length, Johnny Jack Ridge Road for three miles and turns northerly along the Conservation Area boundary for two miles where it intersects with Prosper Ridge Road. The boundary extends down this road for nearly three miles and reaches its northernmost point at the Mattole River estuary and campground.

The WSA contains a unique and diverse landscape. The 22 miles of remote, unroaded and undeveloped coastline, and the King Range Mountains on the east are the two most prominent physiographic features of the area. King Range Peak towers 4,087 feet above the coastline. The WSA is very steep and rugged with many short, steep streams running to the ocean. The abundant rainfall often causes the soils to slump, resulting in natural but severe landslides. Streams branch in a dendritic pattern creating narrow, short ridges and steep canyons. The eastern slopes of the range, while also steep and rugged, are not as severe as the western side. Streams such as Honeydew Creek drain less abruptly into the northerly flowing Mattole River. West-facing slopes south of the Smith-Etter Road are densely covered with brush. Stands of timber are generally found on north-facing slopes near drainages. Grassy areas are found on the hillsides of the northern portion of the WSA and along the shoreline at Big Flat and Spanish Flat.

Numerous special designations overlay the King Range WSA. In 1970, Congress designated the King Range the U.S.'s first National Conservation Area (Public Law 91-476). Nearly 15 miles of hiking and horseback riding trails traverse the main ridgeline near King's Peak and are designated a part of the National Recreation Trails System. Humboldt County has designated the WSA's 22-mile shoreline the Coastal Trail. The intertidal zone along the coastline of the WSA was designated by the California Water Resources Control Board as an Area of Special Biological Significance. The decommissioned Punta Gorda Lighthouse, located three miles south of the Mattole River Estuary, is listed on the National Register of Historic Places. Its designation, however, was precluded due to insufficient baseline data. The rocks and islands along the California Coast are managed under a Memorandum of Understanding between the BLM and the California Department of Fish and Game.

Five coastal tracts of private land totalling 196 acres have been acquired within the area recommended suitable since the completion of the Final Intensive Inventory in 1979. They were included for analysis in the Final EIS.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Five suitability recommendations were analyzed in the Draft EIS. Four suitability recommendations were analyzed in the Final EIS: no wilderness, all wilderness, a partial-wilderness recommendation in which 65% of the WSA would be designated wilderness, and a District Advisory Council recommendation of 40% wilderness.

2. RECOMMENDATION AND RATIONALE

20,517	acres recommended for wilderness
13,237	BLM acres recommended for non-wilderness

Sixty-five percent partial wilderness is the recommendation for this WSA. 13,237 acres in this WSA are released for uses other than wilderness. In addition to the Federal acreage recommended for wilderness, BLM recommends that 269 acres of private land be acquired through exchange, purchase or condemnation if private use will be incompatible with the King Range Management Plan. With acquisition of these inholdings, a total of 20,517 acres would ultimately become wilderness. Appendix 1 lists all inholdings and provides additional information on their acquisition.

The all-wilderness alternative is considered to be the environmentally-preferred alternative as it would result in the least change from the natural environment over the long-term. This alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts. The rationale for selecting this 63 percent partial-wilderness recommendation is: 1) the lands proposed for wilderness designation contain outstanding wilderness values; 2) the area's most significant wilderness values, including 16.5 miles of unroaded shoreline, would be preserved and protected; 3) wilderness designation of the recommended portion of the WSA would have minimal conflicts with other resource uses; 4) manageability problems would occur less frequently, with less magnitude and would be easier to solve because the recommended wilderness boundary follows major physiographic features; and, 5) the recommendation is consistent with management objectives outlined in the 1974 King Range National Conservation Area Management Program.

The lands recommended for wilderness designation possess an outstanding primitive character which exemplifies the qualities described in the definition of wilderness contained in Section 2(c) of the 1964 Wilderness Act. The western slope, both north and south of King's Peak is untrammeled by man and retains its primeval character and influence. The extensive trail system provides an outstanding challenge and unique experience for hikers, backpackers and horseback riders. Evidence of previous visitors, and indeed of one's own passage, may be obliterated within minutes by heavy winds, rainstorms and violent and unpredictable ocean waves. Low visitation and the screening effect of the deep canyons, high mountains and dense vegetation ensure continued exceptional opportunities for seclusion. Excellent scenic views of the unique and dynamic shoreline found at few other places in the Continental United States contribute to the area's attractiveness.

The suitability recommendation will preclude any further vehicular use of approximately 21 miles of primitive access routes of travel. Public use of the Smith-Etter travel route proposed in the Final EIS was to be kept open and maintained as a road to a point one-third mile from the beach. It will now remain closed to all public vehicle use from it's intersection with Telegraph Ridge Road to the Beach. Private inholders will be permitted vehicle access to their property by way of this travel route, consistent with historical use.

Nearly all of the boundary of the area recommended suitable for wilderness designation follows major physiographic features. This enhances the effectiveness of management actions designed to protect the wilderness resource. Sea Lion Gulch, the northern boundary of the recommended wilderness area, is the most effective natural barrier to vehicle access along the entire WSA shoreline. The large boulders prevent ORVs from travelling south into the suitable area. North of Sea Lion Gulch, which is called Parcel A and recommended nonsuitable as wilderness, man-made landscape changes and developments have detracted from the area's natural condition. These include four cabins, one barn, three corrals, five concrete stock tanks, four range utilization cages, four small exclosures, approximately seven miles of fence and nearly six miles of abandoned ranch road, all of which are associated with cattle grazing operations. The continual sights and sounds of vehicles that are necessary to maintain these range improvements, as well as to access a private inholding at the mouth of Four Mile Creek, have also resulted in a landscape that appears unnatural and noticeable throughout Parcel A.

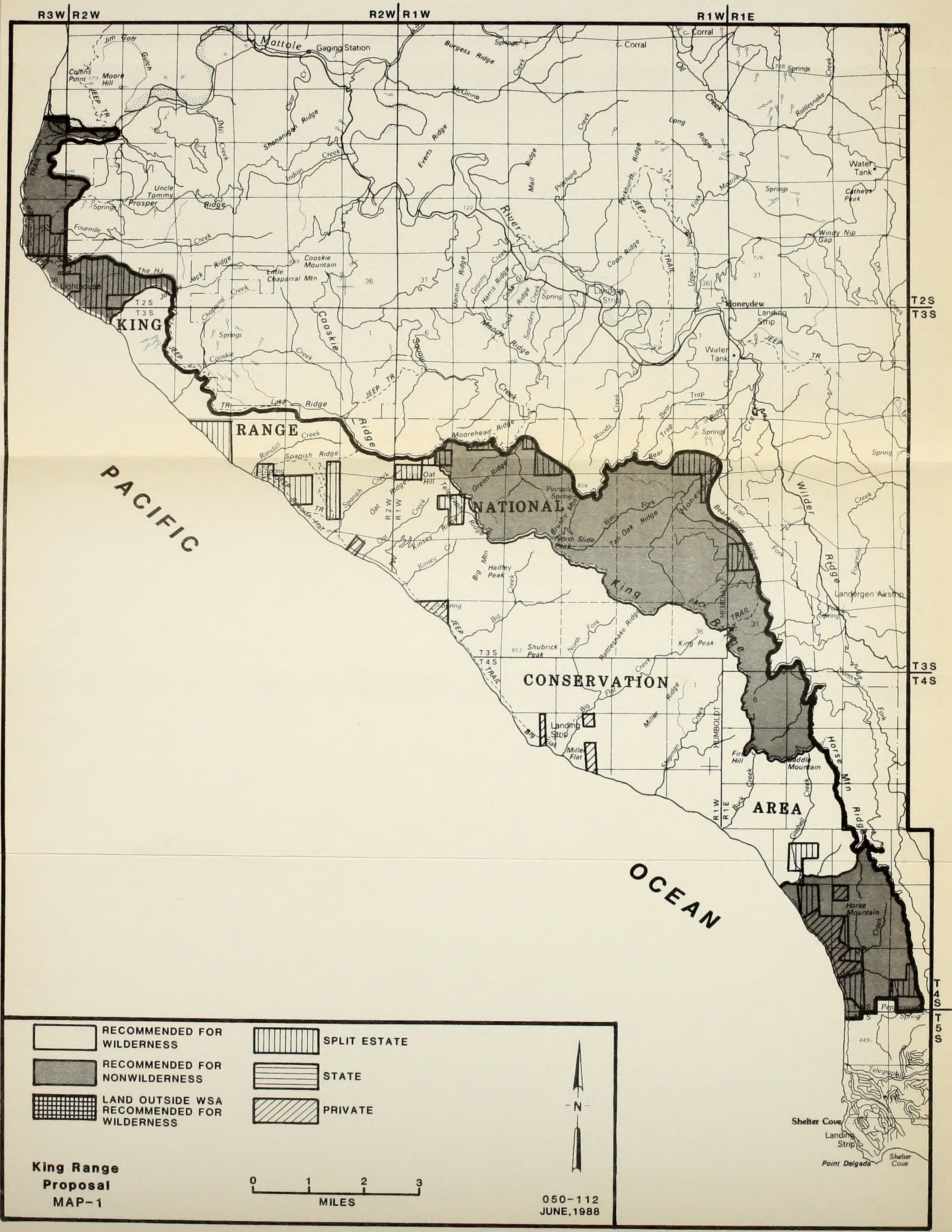
The eastern slope of the WSA, called Parcel B, is recommended nonsuitable as wilderness. Although the area does contain special features such as the old-growth Douglas-fir forest which is habitat for several relatively uncommon birds such as the spotted owl, it is not as unique and spectacular as the WSA's western slope and shoreline influence. The imprints of man in Parcel B are more visible than those with the area recommended suitable. This is apparent if one hikes along the old, abandoned logging and ranch roads that extend south from the Smith-Etter Road.

The sights and sounds of man are obvious and continuous in Parcel B because of the human activities occurring just one mile east in the relatively populated area on Wilder Ridge. The noises from mechanical equipment used for road construction and maintenance, timber harvest, home construction and transportation make it difficult to find secluded places and detract from the primitive setting.

The southernmost portion of the WSA, called Parcel C, is also recommended nonsuitable for wilderness designation. The rationale centers on the existence of five private inholdings totalling approximately 240 acres. Two of these parcels contain residential dwellings with nearby developments such as springs, water holding tanks, fences, landscaped gardens and a network of 4WD access routes. These land improvements negatively impact the area's natural condition and are visible from almost anywhere in Parcel C. The use of vehicles for reasonable access to these private lands is appropriate in this area and would conflict with wilderness management.

As prescribed in the 1974 King Range Management Program, the beach zone within Parcel C is designated "open" to OHVs. Primitive recreation activities are negatively impacted by the sights and sounds of the ATVs that are found here.

Within the unsuitable portions of the King Range WSA (Parcels A, B and C), there are approximately 16 miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use.



King Range Proposal
MAP-1

050-112
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	33,485
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		548
Total		34,033
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	20,248
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		20,248
Inholdings		
State		
Private [1]		269
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	13,237
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		13,237

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[1] Appendix 1 is a detailed description of inholdings and split estate tracts included within the study. For purposes of this report, split estate lands are defined only as those lands with Federal surface and non-Federal subsurface (minerals). Lands that have Federal minerals but non-Federal surface should be classified in this report by the owner of the surface estate.

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The portion of the WSA recommended for wilderness is essentially untrammeled by man. Signs of man on the upper slopes and ridges in this area include an old timber harvest operation covering about 20 acres and approximately two miles of firebreaks just south of King's Peak. These intrusions are substantially unnoticeable.

   The Federal lands from Spanish Flat to Sea Lion Gulch and up to Cooskie Ridge are grazed by cattle on a seasonal basis. Improvements related to this activity include approximately three miles of fence, three water troughs, 10 utilization cages and 10 small enclosures. These developments, along with the presence of cattle, have slightly reduced the quality of the suitable area's naturalness.

   On private lands within the suitable area between Spanish Flat and Big Flat, man-made developments include three cabins, a small storage shed, an unimproved airstrip and approximately three miles of unmaintained routes of travel. This has resulted in slightly altering the coastline's natural appearance. All five of these private inholdings are recommended for acquisition and designated wilderness.

   Within the portion of the WSA recommended for non-wilderness in Parcel A, naturalness is affected by vehicle tracks on the beach and hillsides, by many abandoned ranch roads that are now used occasionally as OHV access routes to the beach, and by extensive cattle grazing which has caused localized soil erosion, hillside terracing and unsafe drinking water supplies. The decommissioned Punta Gorda Lighthouse is of historical importance but nonetheless a distinct sign of man's past use of the area. Parcel B contains several abandoned logging roads that lead from the Smith-Etter Road into Honeydew Creek. Accelerated erosion is evident along these routes of travel. Approximately 10 miles of hiking trail and two primitive camps have been constructed by BLM just east of King's Peak, and are minor imprints on the landscape. Parcel C shows abundant signs of man's imprint on the beach, as this three mile long riding area is currently designated "open" to vehicle use, and tracks abound throughout the sand dunes and nearby hillsides. A recently acquired parcel just north of Horse Mountain Creek is the site of a relatively new cabin, which was used as a residence by the previous owner. A dirt road extends from the cabin, up the hillside, and ends at another cabin on private land. Cattle are currently being grazed in this area.

2. Solitude: The large size, rugged topography, and dense vegetation of the WSA recommended suitable for wilderness designation allows excellent visual screening, enhancing the opportunities for

visitors to find solitude throughout most of the WSA. In the southern and northeastern portions of the WSA recommended nonsuitable, the sights and sounds of residential development substantially diminish opportunities for solitude. Several private inholdings are located in both Parcels A and C, and the activities that occur on these lands such as habitation, summer recreation, and motorized access make it difficult to find a secluded place, particularly along the western slope north of Four Mile Creek, and in the Horse Mountain and Kaluna Cliff areas. Existing authorized use of motor vehicles on the beach from Gitchell Creek to the southern boundary of the WSA at Kaluna Cliff (by both private owners and the public) substantially reduces opportunities for solitude.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The portion of the WSA recommended suitable provides outstanding opportunities for primitive and unconfined recreation. The 15 mile network of hiking trails along the ridges and western slope, plus the 16.5 miles of coastline, offer outstanding opportunities for diverse types of recreation over a large area. The King Range beach is one of the few publicly owned portions of California's coastline where visitors has the opportunity to hike, camp, stream and surf fish, sightsee, and pursue many other types of dispersed recreation activities in a wild setting.

4. Special Features: The King Range represents a landscape diversity rare and unique. Rising from a coastline of tide pools, beaches, massive rocks and cliffs, to rugged mountains exceeding 4,000 feet in elevation in less than three miles, gives credence to its claim as the "Lost Coast".

   The area contains several unique series of animals. A herd of Roosevelt Elk (Cervus elaphus roosevelti) was introduced in 1983, and has become well established. A recent introduction of Texas turkey (Meliagris gallopavo intermedia) adds to the variety of wildlife. In addition, sea lion (Eumetopias jubata) and sea otter (Enhydra lutris) are regularly seen along the beach.

   Within the King Range WSA are significant botanical resources. They include:

   - The Mattole dune system is unique in that the aggressive introduced European dune grass, Ammophila arenaria, has not yet encroached on the Mattole dunes as it has on most coastal dunes north of San Francisco.

- The leafy reedgrass, Calamogrostis foliosa, found along the WSA's coastal strand, is a U.S. Fish and Wildlife Service candidate for listing as threatened.
- Located on the east slope of the Honeydew Creek, drainage is an old-growth Douglas-fir forest. It provides an opportunity to observe rare ecosystems which support old-growth dependent animal species and regional biological diversity, conserve plant and animal genetic stock and provide opportunities for scientific research.

The WSA's shoreline is the focus of several cultural resource field investigations. Recent studies indicate this area contains at least 45 prehistoric archaeological sites which may be of national significance.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 29,742 acres of the Pacific Forest/Mixed Evergreen and 3,743 acres of the Pacific Forlest/Fescue California Oatgrass ecosystems. Addition of the area recommended suitable for wilderness designation would expand the diversity within the NWPS because there is presently only one coastal wilderness area (Point Reyes National Seashore) composed of mixed evergreen forest combined with a coastal prairie-scrub mosaic. The WSA is one of the few remaining extensive stretches of unroaded coastline in the United States that offers outstanding opportunities for a superior backpacking experience.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PVN	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
		NATIONWIDE		
Pacific Forest/California Mixed Evergreen	5	433,107	2	10,387
Pacific Forest/Fescue Oatgrass	1	5,078	0	0
		CALIFORNIA		
Pacific Forest/California Mixed Evergreen	4	45,074	2	10,387
Pacific Forest/Fescue Oatgrass	1	5,078	0	0

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: This WSA is within a five-hour drive of two major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Center	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Redding	14	1,236,503	11	344,633
Santa Rosa/Petaluma	10	888,579	12	134,167

3. Balancing the geographic distribution of wilderness areas: There are two designated wilderness areas within 50 air miles of this WSA. They include the Yolla Bolly-Middle Eel Wilderness and the North Fork Wilderness, both managed by the Forest Service. The Chemise Mountain WSA, two miles to the south, is recommended for all-wilderness.

C. Manageability

The entire WSA is manageable as wilderness. However, there is a significant difference in the manageability of the portion recommended for wilderness and Parcels A, B, and C recommended for non-wilderness. In the suitable portion of the WSA, 21 miles of travel routes would be closed to motorized vehicle use. This includes the Smith-Etter access route which will continue to be closed to public vehicle use west of Telegraph Ridge. This closure point could be managed very effectively as a parking area and trailhead. A large firegate was placed here several years ago which prevents nearly all unauthorized vehicles from travelling down the west slope to the beach. The site could also serve as a staging area where hikers and backpackers could travel south to the King Crest Trail or north to the Spanish Ridge Trail.

Maintaining and enhancing the wilderness experience of visitors who hike the beach would be more effective if the five private inholdings between Spanish Flat and Big Flat were acquired and designated wilderness. The continued use of motorized vehicles down the Smith-Etter access route and along the beach by these landowners is a difficult management situation. The sights and sounds of vehicles on this route cannot be screened from the backpackers because the area is too narrow and lacks adequate vegetation and terrain variation.

A factor affecting whether the unsuitable portion of the WSA (Parcels A and B) could be managed as wilderness is the substantial amount of grazing activity that occurs. There are currently four grazing allotments, covering approximately 75 percent of the public land within the WSA from the Mouth of the Mattole River south to Spanish Flat. Although grazing is allowed in wilderness areas, it would be difficult to manage this portion of the WSA as wilderness due to motorized vehicles used to support this grazing use. The Final EIS recommends the use of pack animals instead of motorized vehicles to reduce these impacts on wilderness values.

The major problem with managing the southern portion of the suitable area as wilderness is enforcing the vehicle closure along the beach north of Gitchell Creek. There are no physical barriers at Gitchell Creek to prevent motorized vehicles from travelling north into the suitable area and degrading opportunities for solitude.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: The geology and mineralization of the King Range WSA is described in the Unit Resource Analysis (URA) and based on data in the Mineral Resource Inventory (MRI) files for the BLM King Range Planning Unit. The MRI data in the Affected Environment section of the King Range Wilderness Final EIS prepared in 1988 indicated that this WSA has a low potential for the occurrence of energy-related, metallic and nonmetallic mineral resources. There are no patented or unpatented mining claims in the WSA. The geothermal resource potential of the area is low. No mineral material sites exist in the WSA, nor are there any sodium or potassium leases. The low porosity and permeability of the Franciscan sandstones that underlie the WSA indicate a very low potential for the occurrence of oil and gas. A low potential exists for the occurrence of uranium and thorium. The potential for economic development of the energy and mineral resources of this WSA is very low.

2. Summary of significant new mineral resource data collected since the nonsuitability recommendation, which should be considered in the final recommendation: Portions of the King Range WSA became an Instant Study Area as mandated by section 603 of FLPMA and as such was the subject of a mineral survey by the U.S. Bureau of Mines and U.S. Geological Survey. The results of the mineral survey were published in 1980 (MF 1196 A-C and Open File Report 80-815) and included in BLM's preliminary analysis and recommendations.

E. Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered including designation or nondesignation of the entire WSA as wilderness.

TABLE 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (PARTIAL-WILDERNESS)	ALL-WILDERNESS ALTERNATIVE	NO WILDERNESS/NO ACTION ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Impact on Wilderness Values	Wilderness values will be moderately impacted as a result of continued & projected vehicle use (from 1800 visitor days annually to 2150 visitor days on the 13 miles of road which will remain open, and the surface disturbance/noise associated with logging 240 acres every 10 years for the next century. Naturalness characteristics will be lost on approximately 300 acres over the next 10 years & each succeeding decade until 2090. The perception of solitude will be impaired on 3250-3500 acres during the first decade & 750-1000 acres each succeeding decade until 2090.	Closure of the 20 miles of existing roads traversing the WSA to motorized vehicular use & 1800 visitor-days of motorized recreation use & elimination of timber harvests on 6985 acres would have a moderate benefit on the area's wilderness values.	Wilderness values would be moderately impacted as a result of continued & projected vehicle use (from 1800 visitor-days annually to 2150 visitor-days) on the 16 miles of road which would remain open, & the surface disturbance/noise associated with logging 700 acres every 10 years over the next century. Naturalness characteristics would be lost on approximately 900 acres over the next 10 years & each succeeding decade until 2090. The perception of solitude would be impaired on 4500-5000 acres during the first decade & 1500-2000 acres each succeeding decade until 2090.	Wilderness values would be moderately impacted as a result of continued & projected use (from 1800 visitor days annually to 2150 visitor days) on the 13 miles of road which would remain open, and the surface disturbance/noise associated with logging 700 acres every 10 years over the next century. Naturalness characteristics would be lost on approximately 900 acres over the next 10 years & each succeeding decade until 2090. The perception of solitude would be impaired on 4500-5000 acres during the first decade & 1500-2000 acres each succeeding decade until 2090.
Impact on Motorized Recreation Use Levels	Motorized recreational use will be slightly enhanced--13 miles of road within the WSA will remain open & continue to be maintained & motorized use levels will increase from 1800 visitor-days annually to 2150 visitor-days.	Motorized recreational use would be foregone on the roads within the WSA eliminating 1800 visitor-days annually. Impacts would be moderate due to the limited amount of opportunity on public lands surrounding the WSA.	Motorized recreational use would be slightly enhanced --16 miles of road within the WSA would remain open & continue to be maintained, & motorized recreational use levels would increase from 1800 visitor-days annually to 2150 visitor-days.	Impacts would be the same as for the Proposed Action.
Impact on Livestock Grazing Management	Road closure & vehicle use restrictions along the Smith-Etter Road & Spanish Ridge Road will have a minor negative impact on livestock grazing management.	The impacts would be the same as for the Proposed Action.	The impacts would be the same as for the Proposed Action.	Closure of Spanish Ridge Road would have a negligible adverse impact on livestock grazing.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION (PARTIAL-WILDERNESS)	ALL-WILDERNESS ALTERNATIVE	NO WILDERNESS/NO ACTION ALTERNATIVE	Partial-wilderness ALTERNATIVE
Impacts on Timber Management	35 MMbf of merchantable timber will be foregone & 2125 acres of commercial forest land (CFL) will be eliminated from timber harvest which will have a negligible adverse impact on the region's economy.	54.7 MMbf of merchantable timber would be foregone & 4555 acres of CFL would be eliminated from timber harvest which would have a negligible adverse impact on the region's economy.	54.7 MMbf of merchantable timber would be harvested & 4555 acres of CFL would remain available for timber production which would moderately benefit the area's timber management program & negligibly benefit the region's economy.	The impacts would be the same as for the No Wilderness/No Action Alternative.
Impact on Roosevelt Elk	Reintroduction & management efforts will be slightly enhanced by the continued closeure of the area to motorized vehicular use (except on the 13 miles of designated routes of travel) & the use of motorized vehicles for elk transplants & herd maintenance.	The impact would be the same as for the Proposed Action.	The impact would be the same as for the Proposed Action.	The impact would be the same as for the Proposed Action.
Impact on Salmon Steelhead Spawning & Nursery Streams	Salmon & steelhead habitat will receive moderate positive impacts from various habitat improvements constructed in or near the river.	Overall, the impacts would be the same as for the Proposed Action; vehicle closures & the elimination of timber harvests, however, would enhance the quality of spawning & nursery streams.	The impacts would be the same as for the Proposed Action.	The impacts would be the same as for the Proposed Action.
Impacts on Archaeological Resources	There will be a minor negative impact to the area's archaeological resources as a result of increased pedestrian use.	There would be a minor positive impact to the area's archaeological resources as a result of eliminating motorized access & increasing monitoring.	The impacts would be the same as for the Proposed Action.	The impacts would basically be the same as for the Proposed Action, except that there would be a minor increase in pressure on archaeological resources because the Smith-Etter Road would be open to the beach.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain comments received during the Inventory and Study Phases, and in the Draft EIS were used to develop significant issue topics, various alternatives and finally, to recommend 63 percent Partial-Wilderness for the King Range WSA.

A majority of the comments addressing the inventory factors agreed with the present status of the WSA's boundary or felt it should be expanded to include the entire King Range National Conservation Area. Other comments said the roads were not maintained regularly and should have been identified as ways. Nearly everyone commented on the unique and spectacular landscape of the west slope and shoreline.

During formal public review of the Draft EIS, a total of 515 oral and written comments and 2,340 signatures specifically addressing this WSA were received. Of the 515 comments, 475 remarked in favor of the All-Wilderness Alternative. Very few comments addressed the issue topics nor did they discuss the impacts of the alternatives.

Many commenters argued that the administrative protection of primitive values identified in the 1974 King Range Management Program should not be equated with the protection offered by wilderness designation. Some commenters demanded more detailed site-specific descriptions of impacts on various resources. The impacts of motorized vehicles on wilderness values was raised as an issue by a substantial number of respondents. Those favoring wilderness commented on the importance of the Honeydew Creek drainage because of it's significant wildlife and fisheries values, and because it contains a rare, large, old-growth Douglas-fir forest and associated old-growth dependent species. They wanted this 4,000-acre watershed included in the partial-wilderness recommendation because they thought the only way to keep it from being logged was to designate the area wilderness. Of particular concern was the need to close the entire beach from the mouth of the Mattole River to Shelter Cove to motorized vehicles to prevent recent use conflicts and reduce the potential for damage to significant archaeological sites.

Those opposing wilderness designation were concerned that the roads inside the WSA, especially the Smith-Etter Road, would be closed to motorized vehicles and result in a substantial reduction in opportunities for scenic drives. A few landowners with private inholdings felt their land would be taken away. Others commented that wilderness designation would prevent effective firefighting efforts if an uncontrolled wildfire were to occur in the King Range.

The Ukiah District Advisory Council appointed a Technical Review Team (TRT) to study wilderness issues in detail because of the many concerns and controversies expressed by the general public, special interest groups and government agencies. The Council, after reviewing the TRT's report, recommended to the District Manager a 40 percent Partial-Wilderness Alternative which included a portion of the west slope both north and south of Big Flat Creek.

The U.S. Environmental Protection Agency classified the Draft EIS as category LO, Lack of Objectives. Concern was expressed about potential adverse impacts on water quality from grazing activities, road construction and maintenance, potential timber harvest operations and stream-clearing work. Concern about mineral resources was expressed by the U.S. Bureau of Mines. They emphasized that mineral deposits of economic value may be found in areas of low potential. The U.S. Dept. of Air Force is generally supportive of wilderness designation provided that no restrictions are placed on essential military overflights. The major concern expressed by the U.S. Fish and Wildlife Service was the assurance that salmon and steelhead habitat both in the Honeydew Creek drainage and west slope coastal streams are protected.

California Assemblyman Dan Hauser expressed his concern that the Honeydew Creek watershed was not included in the area recommended for wilderness designation because he thinks the high quality salmon and steelhead spawning grounds and old-growth Douglas-fir forest should be protected. The California Coastal Commission said BLM should prepare and submit a consistency determination for those actions specified in the EIS which may have a direct effect on the coastal zone. The potential for developing wind energy under wilderness was a concern of the California Energy Commission. The California Department of Forestry was very concerned about it's firefighting capabilities in areas recommended for wilderness designation, especially when houses on private inholdings and nearby residential communities could be threatened. The Honeydew Creek drainage was recommended for inclusion as wilderness by the California Department of Fish and Game because of the special wildlife resource values that require protection. The Humboldt County Board of Supervisors agreed with the District Advisory Council recommendation that 14,000 acres in the vicinity of Big Flat Creek be designated wilderness. They also identified the need to allow fire-fighting techniques which prevent the spread of fire into nearby communities such as Shelter Cove, Honeydew and Petrolia.

APPENDIX 1
ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION
KING RANGE WSA (CA-050-112)

PARCEL No.	LEGAL DESCRIPTION TWNSHP	RNG	SEC	MERIDIAN	TOTAL ACREAGE	NUMBER OF OWNERS	TYPE OF OWNERSHIP BY ESTATE SURFACE ESTATE	SUBSURFACE ESTATE	PRESENTLY PROPOSED FOR ACQUISITION	PREFERRED METHOD OF ACQUISITION	ESTIMATED COST OF ACQUISITION LAND COSTS ($1000)	PROCESSING COSTS ($1000)
1	4S.	1W.	9	MDM	30	2	PRIVATE	PRIVATE	YES	PURCHASE	135.0	Unknown
2	4S.	1W.	10	MDM	40	1	PRIVATE	PRIVATE	YES	PURCHASE	250.0	Unknown
3	4S.	1W.	10	MDM	40	1	PRIVATE	PRIVATE	YES	PURCHASE	50.0	Unknown
4	3S.	2W.	24&25	MDM	10	1	PRIVATE	PRIVATE	YES	PURCHASE	50.0	Unknown
5	3S.	2W.	24&25	MDM	10	1	PRIVATE	PRIVATE	YES	PURCHASE	50.0	Unknown
6	3S.	1W.	31	MDM	30	1	PRIVATE	PRIVATE	YES	PURCHASE	250.0	Unknown

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These figures were derived from Bureau Land Records and provide for more detail than GIS estimates and therefore may differ from acreage summaries in Table 1.

Red Mountain

CA-050-132

RED MOUNTAIN WILDERNESS STUDY AREA (WSA)

(CA-050-132)

1. THE STUDY AREA --- 6,244 acres

The Red Mountain WSA is located in northern Mendocino County, California two miles northeast of Leggett. The WSA includes 6,244 acres of BLM lands, with no State, private or split estate inholdings. It is bounded on the north, south, and west sides by private property, and on the east side by Bureau of Land Management (BLM) land (see Map 1 and Table 1).

The WSA's boundaries are defined by section lines, physiographic features, five miles of cherry-stemmed roads and two mining roads; one road is located in the northeastern portion of the WSA and the other forms the southeast corner of the area. Starting at the northern end of the WSA, next to Hiltabidels Opening, the boundary line extends east for two-thirds of a mile, then south on a mining road for one mile, and east again next to Chimney Rock for nearly three miles. The boundary line then heads south from the headwaters of Cedar Creek for one and one-half miles, turns westerly paralleling Cedar Creek canyon for about five miles and heads north at Section 1 for nearly four miles. At the headwaters of Bridges Creek, the boundary line heads east for one and one-half miles and then north in Section 18 for one-half mile.

Red Mountain and the Cedar Creek drainage dominate the WSA. Elevations range from 1,100 feet at the southwest end of the unit along Cedar Creek to 4,083 feet, less than three miles away at the top of Red Mountain. Terrain is generally steep, consisting of rugged drainages dropping abruptly into Cedar Creek canyon. A small area of fairly gentle slopes is found near the summit of Red Mountain. A zone of reddish soil, comprising 60% of the WSA, occupies the central part of the WSA and contrasts sharply with the surrounding landscape. These unusual soils have resulted in a unique vegetation cover of several species of pine and cypress trees intermixed with a low brush understory. Barren and rocky areas, covering approximately 10% of the WSA, occur on steep slopes above Cedar Creek. The rest of the WSA with more common soils, has a cover of Douglas-fir and mixed evergreen forest typical of the region.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various suitability recommendations were analyzed in the Draft and Final Arcata Resource Area Red Mountain WSA EIS. Because of the area's small size and concentration of numerous intrusions in the central portion of the WSA, the Final EIS analyzed two alternatives: all-wilderness and no-wilderness. A 242-acre tract of private land, contiguous to both the WSA boundary and a previously isolated 40-acre parcel of public land, was recently acquired by the BLM. This resulted in a total of 282 acres of Federal land adjacent to the WSA boundary. Because of this area's unique soils and special botanical values, it was included for analysis in the Final EIS under Section 202 of FLPMA.

2. RECOMMENDATION AND RATIONALE

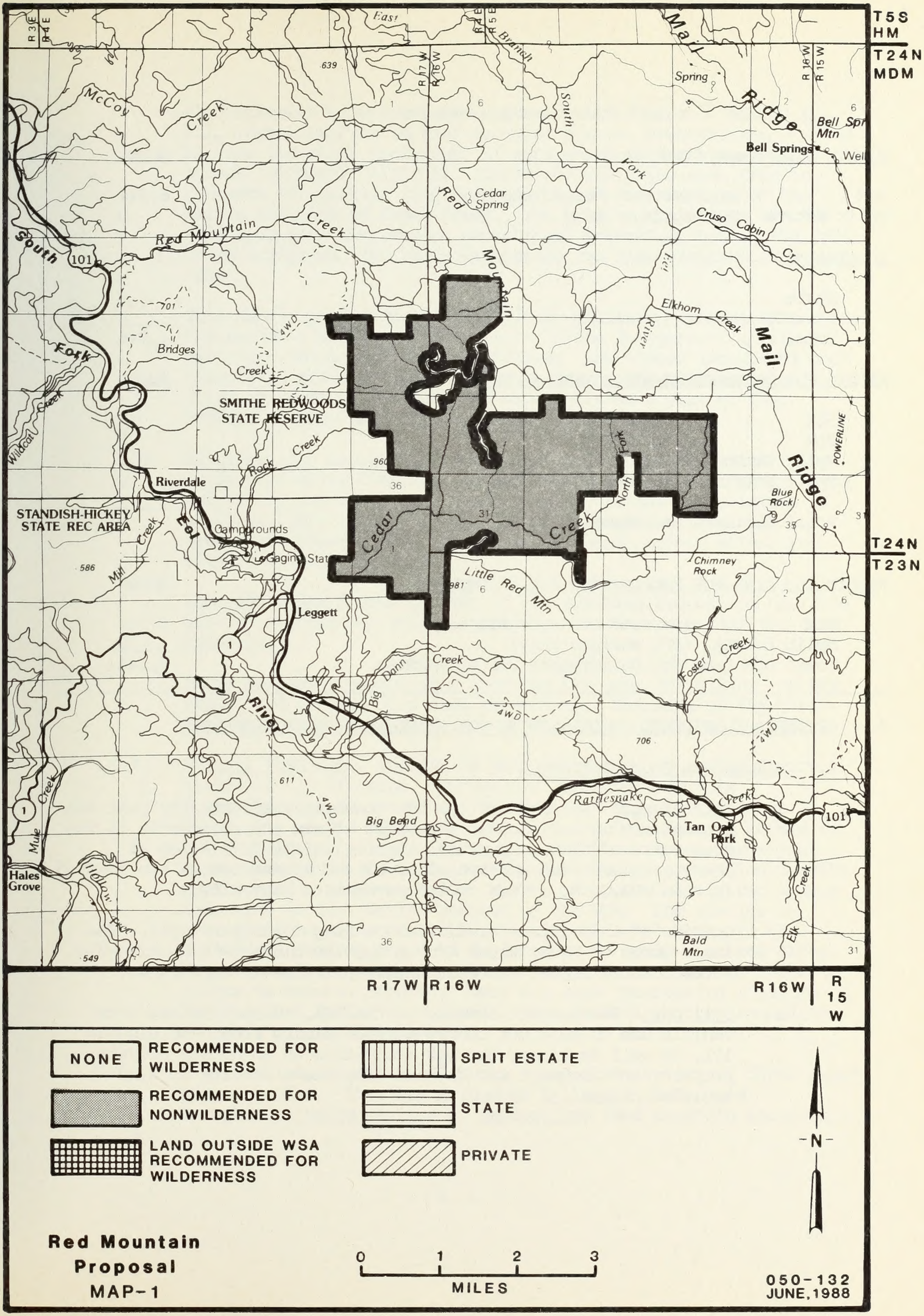
0	acres recommended for wilderness
6,244	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This includes the 242 acres of acquired land and the previously isolated 40 acre parcel. The all-wilderness alternative is considered to be the environmentally-preferred alternative as it would result in the least change from the natural environment over the long term. This alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The WSA is recommended nonsuitable for wilderness because it contains a significant amount of critical and strategic minerals (nickel, cobalt and chromium), which outweigh the area's wilderness values. Although the Final Wilderness EIS assumes mining will not occur under either alternative, the mineral deposit, covering the central portion, or 50 percent of the WSA, is one of the largest potential domestic sources in the United States. The option of having this resource available for development, to supply future industrial, military, and civilian needs of the United States outweighs the area's value as wilderness.

The wilderness values of the area as a whole are of low quality. The five miles of cherry-stem roads and ten miles of four-wheel drive (4WD) access routes that lead to thirty mining test pits, the sparse vegetation, steep and unstable terrain, and the absence of outstanding recreational opportunities reduce the area's wilderness values.

The WSA does possess some significant special features (botanical and wild-life), and although the WSA is recommended nonsuitable, these values would continue to be protected and managed under the current designation as an Area of Critical Environmental Concern (ACEC)/Research Natural Area (RNA).



Red Mountain Proposal
MAP-1

050-132
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	6,244
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		6,244
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	6,244
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		6,244

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3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: Naturalness has been adversely affected by past and present mining activities. The works of man are noticeable in the area surrounding Red Mountain. Approximately five miles of cherry-stemmed road and ten miles of 4WD access routes are located in this WSA. The access routes revegetate very slowly.

   Outside of this impact area, the WSA is generally natural. The inner gorge of Cedar Creek Canyon and the old-growth Douglas-fir forest, for example, are essentially pristine in appearance.

2. Solitude: Because of the size of the WSA, outside noises from vehicle use on adjacent cherry-stemmed mining roads and Highway 101, as well as timber harvest activities on adjoining private property are frequent and detract from one's ability to find secluded places.

At low levels of use, visitors are able to find solitude in the WSA. Opportunities to find secluded places, however, are limited because the steep topography of many south-facing slopes makes access extremely difficult. Those who visit the area tend to frequent the gentler land near the top of Red Mountain or the narrow corridor of Cedar Creek. The open vegetation of the red soil area does not provide exceptional screening, but in the Cedar Creek drainages, the thick vegetation can hide visitors from each other.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Resources for primitive recreation activities are limited in the WSA. Cedar Creek is the only water feature of any significance. It has a population of small resident rainbow trout that sustains light fishing pressure; however, the creek is a steelhead nursery stream and fishing is not encouraged.

   Although hunters make up most of the existing recreation use, the area as a whole has relatively low production potential for game species.

   Local residents report that they use the area for hiking, nature study, and general dispersed recreation. The size of the WSA limits total capacity for general public use for such purposes.

4. Special Features: The WSA is recognized for its extraordinary botanical significance. McDonald's rock-cress (Arabis macdonaldiana) is an endangered species. The plant species is found only on Red Mountain, Mendocino County, where it occurs on both public and private land. A recently completed three-year study found that about 80 percent of the known population density of McDonald's rock-cress lies within an approximately two-square mile area in the central portion of the WSA. The species is restricted to soils currently classified as belonging to the Hiltabidel Series, where it is found at 20 small discrete sites. Densities of the species at these localities range from a few plants to several hundred. There are some interesting wildlife species that differ from those in the general region, including mountain lion and black bear.

   The WSA also supports the entire known distribution of three other plant species. They are Eriogonum kelloggii (Kellogg's buckwheat), Sedum laxum ssp. eastwoodiae (Red Mountain stonecrop), and Silene campoanulata ssp. campanulata (Red Mountain catchfly) and are considered "candidate species" for Federal listing as threatened or endangered.

The red soils on Red Mountain are different from almost all the other red soils in the United States because they contain very high content of iron, cobalt, and nickel, and a low content of many nutrient elements needed for plant growth. These soils were first identified in the tropics and were formerly called Laterites, lateritic soils, or Latasols. Now they are classified in the soil order Oxisols if the subsurface Oxic horizon meets several specific criteria. If the oxic horizon is less fully developed, they are classified into oxidic families of other soil orders.

The WSA includes the feeding territory of the endangered peregrine falcon. The golden eagle uses the area on a more regular basis with periodic use by the bald eagle, primarily during winter.

Because of the cumulative importance of these special resource values, the WSA and adjacent BLM land are currently designated an ACEC/RNA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contians 6,244 acres of the Pacific Forest/California Mixed Evergreen ecosystem. The Red Mountain WSA would add a special ecosystem to the NWPS. The area is ecologically unique because of its extraordinary wealth of unique soils, plants and animals.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
Pacific Forest/ California Mixed Evergreen	5	433,107	2	34,431
	CALIFORNIA			
Pacific Forest/ California Mixed Evergreen	4	45,074	2	34,431

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major populations centers: The WSA is within a five-hour drive of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

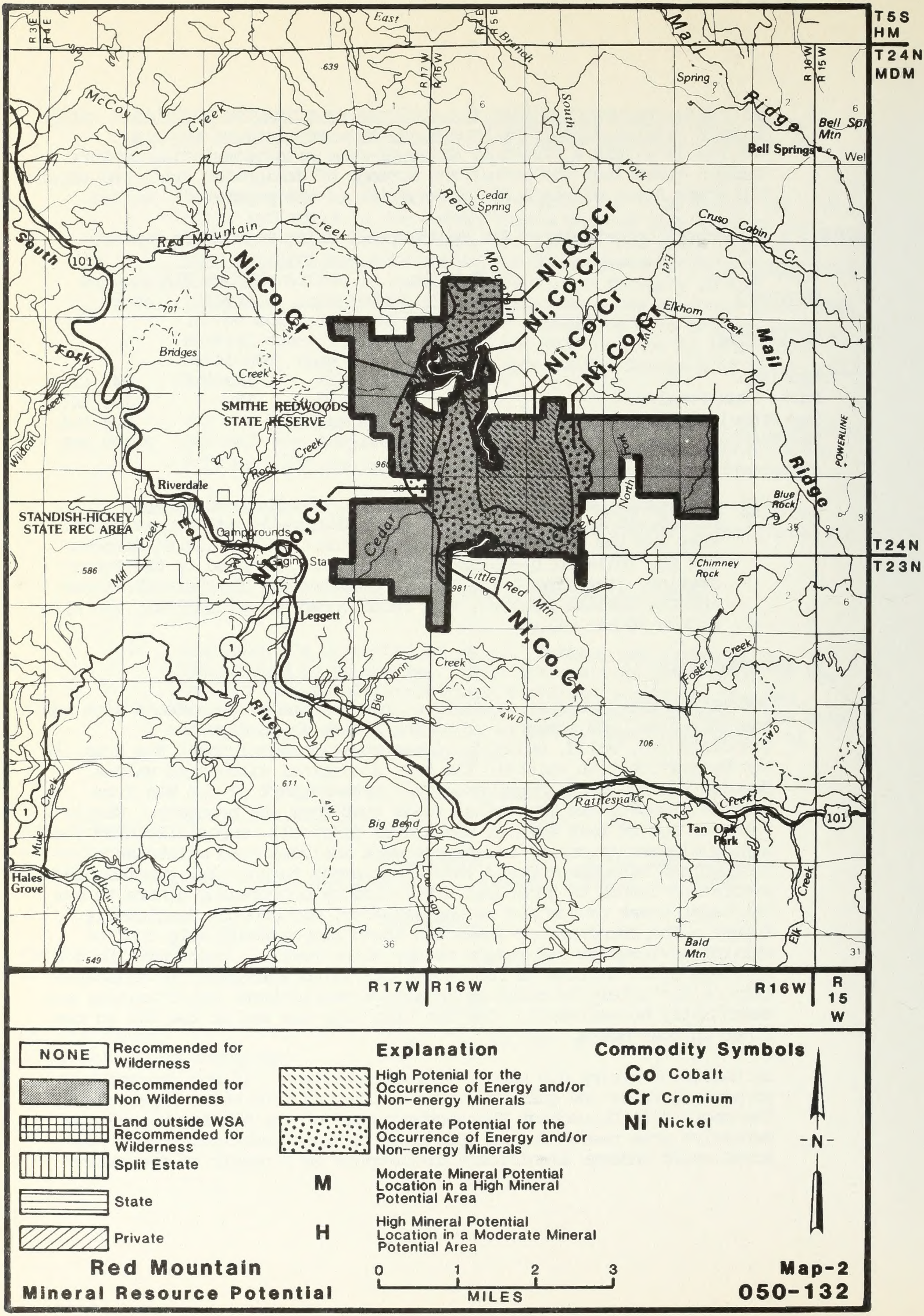
Population Centers	NWPS Acres areas	acres	Other BLM Studies areas	acres
California				
Redding	14	1,236,503	11	344,633
Santa Rosa-Petaluma	10	888,579	12	134,167
San Francisco-Oakland	39	4,473,002	39	565,614
Vallejo-Napa-Fairfield	44	4,832,667	74	2,100,862

3. Balancing the geographic distribution of wilderness areas: This WSA is within 50 air miles of three designated wilderness areas. They are the North Fork Wilderness, the Chanchelulla Wilderness and the Yolla Bolly-Middle Eel Wilderness, managed by the Forest Service. The King Range WSA, recommended for partial-wilderness, and the Chemise Mountain WSA, recommended all-wilderness, are also within 50 air miles.

C. Manageability

The WSA is manageable as wilderness, but because of the area's size and configuration, and presence of mining claims which may have grandfathered, valid, existing rights covering nearly half the area, it may be difficult to maintain the area's marginal wilderness values. Several mining roads cherry-stem the northern part of the WSA from private property and from other roads that form its boundary. Keeping vehicles out of this part of the WSA is difficult, especially when the mining claimant's annual assessment work includes road maintenance. Visitor use management would involve attempts to physically screen the sights and sounds of unnatural activities by encouraging hikers to use the Cedar Creek canyon and nearby 810-acre, old-growth, Douglas-fir forest. The abundance of trees and steep slopes would help confine visitor's viewsheds and reduce nearby noise levels. Opportunities for solitude could decline as the number of visitors increase in this area. This is not likely to occur as primitive recreational opportunities are essentially non-existent. One can hike from one end of the WSA to the other in four hours.

In the event mining did occur, it would be almost, if not impossible, to prevent these low quality wilderness values from being impaired in the short-term throughout the northern half of the WSA because of the extensive area needed for an open bench mining operation. Over 1,000 acres could undergo significant disturbance as a result of the mining



Red Mountain

Mineral Resource Potential

Map-2

050-132

and processing plant facilities. The unique botanical values that make this WSA so important could also be adversely impacted as their locations are virtually coincident with the mineralized zone.

Special management attention is afforded the area through implementation of the Red Mountain ACEC/RNA Management Plan and the Endangered Species Act.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: The Geologic-Energy-Minerals (G-E-M) Report prepared in 1983 for the Red Mountain G-E-M Resource Area (GRA) identified the central two-thirds of the WSA from north to south as having a high or moderate potential for the occurrence of nickel, cobalt and chromite resources, metals determined by the Federal Emergency Management Agency as both strategic and critical (Map 2). The eastern, northwestern and southwestern parts of the WSA have a low potential for the occurrence of these and all other metallic mineral resources. The WSA also has a low potential for the occurrence of uranium, thorium, nonmetallic mineral resources, oil and gas. There are no mineral material sites in the area, nor are there any sodium or potassium leases.

2. Summary of significant new mineral resource data collected since the nonsuitability recommendation, which should be considered in the final recommendation: BLM records, as of January 1988, show that there are 28 lode claims and 29 placer claims in the WSA. Information gained from G-E-M reports and the U.S. Bureau of Mines (1983) indicates the WSA and adjacent private lands contain roughly 30 to 40 million tons of laterite averaging 0.79 percent nickel, 0.06 percent cobalt and 1.42 percent chromium. All U.S. proven nickel reserves total about 360,000 tons in lateritic material containing 0.8 percent to 1.3 percent nickel. All of these reserves are in deposits at the Riddle, Oregon mine, which closed down in 1982 as a result of global economics.

Table 4 - Mining Claims

TYPE	NO. SUITABLE	NONSUIT.	TOTAL	ACRES SUITABLE	NONSUIT.	TOTAL
Mining Claims						
Lode	0	28	28	0	560	560
Placer	0	29	29	0	1,160	1,160
Mill Sites	0	0	0	0	0	0
Total	0	57	57	0	1,720	1,720

E. Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered, including designation or nondesignation of the entire area as wilderness.

Table 5 - Comparative Summary of the Impacts by Alternative

Issue	Proposed Action (No-Wilderness/No Action - RNA/ACEC Designation Remains)	All-Wilderness Alternative
Wilderness Values	None of the area would receive the special legislative protection provided by wilderness designation. The area as a whole will not be impaired, but there will be localized areas (totaling less than 1 percent of the WSA) where naturalness and opportunities for solitude will be impaired. Annual mineral assessment work and fire suppression activities will be the main source of negative impacts. Positive impacts will result from reseeding endangered plants and restricting the use of OHVs and mechanical equipment.	The wilderness values within the WSA and some adjacent lands would receive the special legislative protection provided by wilderness designation. Impacts to wilderness values would be similar to those described for the Proposed Action, mainly because annual mineral assessment work would continue, but impacts would be less severe because there would be less use of vehicles and mechanized equipment.
Ararabis mcdonaldiana and Three "Candidate Plant Species"	All four of the plant species of concern receive net minor positive impacts. Benefits from artificial seeding, prescribed burning, and various means of protection from physical harm will be partially counterbalanced by impacts from mineral assessment, fire suppression, and authorized access.	Net benefits to all four plant species of concern would be slightly greater than under the Proposed Action (minor to moderate) because of reduced vehicle use.
Unique Vegetation Communities	The old-growth Douglas fir, Sargent cypress, McNab cypress, and two bogs will receive net minor benefits from increased protection under the Proposed Action. Impacts from mineral assessment and fire suppression activities will be counterbalanced by benefits from land acquisition and reduced fire hazard.	Net benefits to the four unique vegetation communities would be slightly greater than under the Proposed Action (minor) because of reduced vehicle use.
Steelhead Fishery	There will be moderate positive impacts on the steelhead fishery from habitat improvements in Cedar Creek. Negative impacts from siltation from such activities as mining assessment will be mostly unnoticeable and will be counterbalanced by beneficial impacts from such activities as land acquisition and ranger patrols.	Impacts on the steelhead fishery would be the same as described for the Proposed Action, except that there would be slightly less siltation because of reduced vehicle use.
Drinking Water	There will be no measurable impact on drinking water supplies.	Impacts on drinking water supplies would be the same as under the Proposed Action, except that there would be slightly less contamination because there would be less erosion.

Table 5 - Comparative Summary of the Impacts by Alternative

Issue	Proposed Action (No-Wilderness/No Action - RNA/ACEC Designations Remain)	All-Wilderness Alternative
Unique Soils	There will be only minor, localized disturbance of the unique soils; as a whole they will not be affected.	Impacts on unique soils would be the same as under the Proposed Action, except that there would be slightly less soil disturbance because of reduced vehicle use.
Mining	The Proposed Action will have no impact on the potential for mining within the WSA. Mineral assessment work will be made slightly more costly and less convenient, but the difference will not be enough to change the amount of assessment work done.	Impacts on mining would be the same as under the Proposed Action except that there would be the inconvenience of no vehicular access.
Peregrine Falcon	The Proposed Action will have no measurable impact on the endangered peregrine falcon.	There would be virtually no impacts on the endangered peregrine falcon.
Available Wildlife Habitat	Although there will be minor positive and negative impacts to wildlife habitat, no changes significant enough to affect wildlife populations will occur.	Impacts on available wildlife habitat would be essentially the same as under the Proposed Action, except that there would be even less disturbance because of the prohibition against vehicular use.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Positions expressed by the general public and most interest groups strongly favored wilderness designation while most government entities concurred with the non-wilderness recommendation. Virtually all of the comments referred to the value of the minerals, questioned the use of the term "valid mining claims", or demanded a resolution of the mining issue. Of the 149 comments received during the wilderness inventory, most of the comments dealing with specific inventory criteria agreed with the Bureau's designation of Red Mountain as a WSA. Comments on the protection and importance of salmon fisheries habitat, timber production, rare plants, and mining potential were deferred as study phase considerations. Of the 275 comments received for the purpose of identifying issues and alternatives (scoping), 214 favored wilderness, six opposed wilderness, and 55 did not take a position on wilderness.

A formal public hearing was held on October 12, 1983, in Redway, California. A total of 179 comments, both oral and written, were received during the 90-day public comment period for the Red Mountain DEIS. Seventy-two percent of the comments received favored wilderness designation, four percent supported the ACEC/RNA designation and four percent opposed wilderness. The Ukiah District Advisory Council voted unanimously for the non-wilderness recommendation.

United States Congressman Douglas H. Bosco recommended that no timber harvesting occur if the non-wilderness recommendation is selected by Congress. California State Assemblyman Dan Hauser favored the all-wilderness alternative and recommended that BLM conduct validity examinations on the mining claims.

The Mendocino County Board of Supervisors favored non-wilderness, but were against BLM's plan to harvest timber within the ACEC boundary. They reiterated a statement in the Mendocino County General Plan, i.e., "No permits for large-scale mining of the Red Mountains shall be issued by the County." The California Department of Water Resources favored temporary selection of the Bureau's non-wilderness recommendation because the Department feels the Draft EIS contains insufficient watershed data to select an alternative that would best protect on-site and downstream water resources. The Resources Agency of California offered no comment. The California Department of Fish and Game requested that BLM recognize the value of maintaining habitat for anadromous fish. The Environmental Protection Agency classified the Draft EIS as category LO-1 (Lack of Objections - Adequate EIS). Concerns were expressed by the U.S. Fish and Wildlife Service that herbicide spraying on adjacent private lands could adversely affect Arabis populations. The U.S. Dept. of Air Force supported wilderness designation, in general, provided that no restrictions are placed on essential military overflights.

Big Butte

CA-050-211

BIG BUTTE WILDERNESS STUDY AREA (WSA)

(CA-050-211)

1. THE STUDY AREA --- 2,558 acres

The Big Butte WSA is located in Mendocino and Trinity Counties, California. The nearest towns are Covelo, ten miles to the south, and Ruth, fifteen miles to the north. The San Francisco Bay Area is approximately 150 air miles to the south. The WSA is comprised of five parcels totalling 2,408 acres of Bureau of Land Management (BLM) land and 150 acres of private land. The study area is adjacent to BLM lands that form the western and southern boundary of the Yolla Bolly-Middle Eel Wilderness Area (see Map 1 and Table 1).

The WSA boundary is defined by property lines and physiographic features, such as major ridges and streams that delineate the WSA from the existing wilderness area. The southernmost parcel is nearly two air miles northwest of the most prominent landmark in the Yolla Bolly-Middle Eel Wilderness Area, Castle Peak. The central parcels are situated along Lightning Camp Ridge. The northernmost parcel includes a narrow strip of Federal land that straddles the upper reaches of Antone Creek.

The terrain varies from moderately steep canyons to relatively flat, but narrow ridgetops. The WSA is vegetated with mixed evergreen forests in the drainages and chaparral on the upper slopes and ridges. Elevations range from 3,000 feet to 5,500 feet. All parcels are irregularly shaped.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). Two suitability recommendations were analyzed in the Draft and Final EIS (California Section 202 WSA): no wilderness and all wilderness. A partial-wilderness recommendation was considered but dropped from further analysis because adding portions of the WSA, which is already small in size, to the adjacent wilderness area, would not enhance wilderness values nor would it create a more definable and manageable wilderness boundary.

2. RECOMMENDATION AND RATIONALE

0	acres recommended for wilderness
2,408	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long-term. This alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

This WSA consists of fragmented parcels of public land adjacent to the existing Yolla-Bolly-Middle Eel wilderness. When the California Wilderness Act was developed in 1984 these parcels were considered for wilderness and excluded from the designation by Congress. The current recommendation as nonsuitable for wilderness designation is consistent with this earlier decision. In addition, the USFS agrees with this nonsuitable wilderness recommendation.

The area is recommended nonsuitable for wilderness for the following reasons: 1) the area's wilderness values are low; 2) designation of these parcels would not enhance manageability of the existing adjacent wilderness, and 3) other resource uses outweigh the area's value as wilderness.

The WSA's wilderness values are low. Portions of the WSA have been modified by the works of man. The Big Butte Road passes through the southern parcel and a jeep trail passes through the northern parcel. There are approximately two miles of routes of travel within the area. Opportunities for solitude and primitive recreation are not outstanding. These opportunities are limited by the area' size, shape and the lack of attractive features. There are no special features within this WSA.

Designation of this area as wilderness would not enhance manageability of the adjacent wilderness area. The present boundary of the Yolla Bolly-Middle Eel wilderness is either a ridge line or creek. This boundary is easy to identify on the ground and enhances manageability of the area as wilderness. The addition of this WSA would change the boundary to legal subdivisions which are not easily identified on the ground. This new boundary would be more difficult to administer.

The WSA contains an estimated 17 million board feet of commercial timber which may be available for harvest if the area is not designated as wilderness. The timer values outweigh the area's low wilderness values.

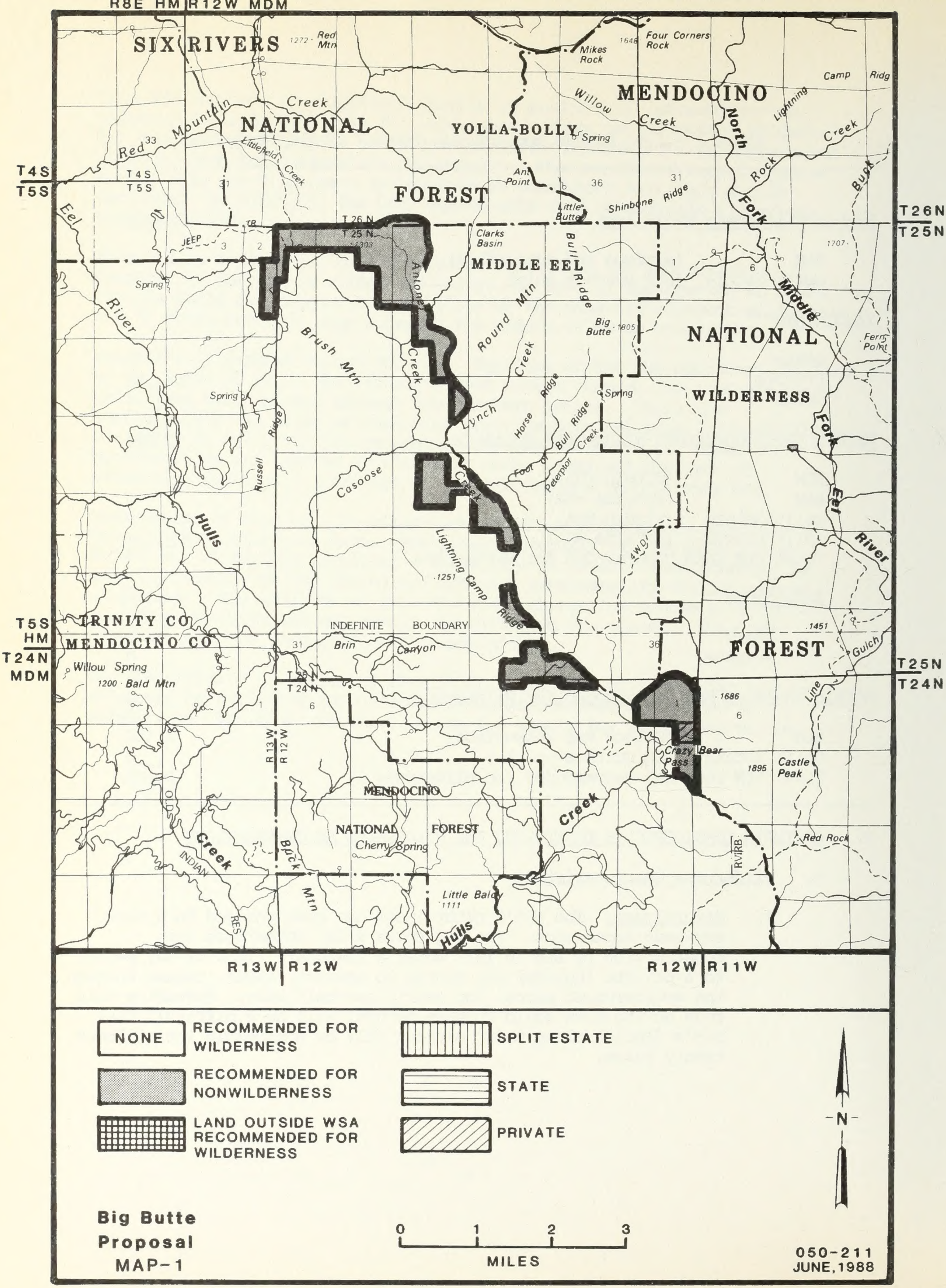
Table 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	2,408
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		150
Total		2,558
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	2,408
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		2,408

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA's naturalness has been changed to a more man-made appearance. The Big Butte Road, authorized for construction by BLM in 1977 under a temporary right-of-way permit to a private inholder who wanted to harvest timber, passes through the southernmost parcel for nearly one-half mile. Restoring this road so the area again appears natural will be a difficult task. Man's imprint along this corridor will be noticeable for at least twenty years.



Big Butte Proposal

MAP-1

Approximately 90 percent of the WSA is currently grazed by cattle, producing an average of 300 Animal Unit Months (AUM's) per year. The high percentage of WSA acreage being grazed continues to degrade the area's natural values, and has resulted in a substantially noticeable imprint on the landscape.

2. Solitude: Opportunities for solitude in the Big Butte WSA are not outstanding because the small size and irregular shape of all parcels make it difficult to find secluded places. Outside noises from vehicles on nearby roads and timber harvesting on adjacent private property are frequent and detract from one's ability to feel alone, away from man's activities. Those who visit the area tend to travel in the stream beds where they are screened by vegetation and the sounds of running water.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: No outstanding opportunities for primitive and unconfined types of recreation exist in this WSA because of its small size, limited access, and absence of attractive landscape features or unique wildlife that might draw more recreationists into the area. Estimated use is less than fifty visits per year. No hiking or horseback riding trails exist in the WSA, and none are planned. Any one of the parcels that comprise the Big Butte WSA can be traversed on foot in less than an hour. Antone Creek is the only water feature that could offer limited water-based recreation activities.

4. Special Features: None exist within this WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contians 1,600 acres of the Pacific Forest/Chaparral and 808 acres of the Pacific Forest/Mixed Conifer Forest ecosystems. The Big Butte WSA would not increase the diversity of the types of ecosystems represented in the NWPS.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Area areas	acres	Other BLM Studies areas	acres
	NATIONWIDE			
Pacific Forest/Chaparral	2	53,770	2	23,084
Pacific Forest/Mixed Conifer Forest	2	141,008	0	0
	CALIFORNIA			
Pacific Forest/Chaparral	1	4,745	2	23,084
Pacific Forest/Mixed Conifer Forest	2	141,080	0	0

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of three major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	acres	Other BLM Studies areas	acres
California				
Santa Rosa-Petaluma	10	888,579	12	134,167
San Francisco-Oakland	39	4,473,002	39	565,614
Vallejo-Napa-Fairfield	44	4,832,667	74	2,100,862

3. Balancing the geographic distribution of wilderness areas: This WSA is within 50 air miles of five designated wilderness areas. In a clockwise direction, beginning to the north is the adjacent Yolla Bolly-Middle Eel Wilderness, then the Trinity Alps Wilderness, the Chanchelulla Wilderness, the Snow Mountain Wilderness and the North Fork Wilderness. All are managed by the Forest Service. Also within 50 air miles is the King Range WSA, recommended for partial-wilderness and the Chemise Mountain WSA, recommended for all-wilderness.

C. Manageability

The WSA is manageable as wilderness, but because of the area's size, configuration and fact that its boundary follows property lines instead of physiographic features, would make it difficult to retain the marginal wilderness values that currently exist. The outside sights and sounds of vehicle use on nearby roads and timber harvest activities on adjoining private property are frequent occurrences. Few places can physically screen visitors from these intrusions.

Motorized vehicles used to maintain grazing developments would be incompatible with wilderness management.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary suitability recommendation: The geology and mineralization of the Big Butte WSA is described in the Unit Resource Analysis (URA) based on data in Mineral Resource Inventory (MRI) files for the BLM East Mendocino Planning Unit. The MRI data in the Affected Environment section of the California Section 202 Wilderness Study Areas, Draft EIS of 1987 indicated that the WSA has a low potential for the occurrence of manganese, chromite and asbestos. All of these minerals have been described as critical and strategic by the Federal Emergency Management Agency. The area has no known potential for other mineral resources. As of July 16, 1987, there were no mining claims recorded in the WSA. No oil and gas, or geothermal lease applications were received as of February 11, 1988.

   While there has been some exploration for chromite within the WSA, there has been no mining within the WSA, with only limited production in the general area outside the WSA.

   Manganese deposits in this area occur in discontinuous lenses which rapidly pinch out and normally have low volume. Because of this, individual deposits have a low value in spite of the ore's high grade. Mining of manganese ore in the general area has been sporadic, with no mining in the Big Butte WSA.

   Exploration for asbestos has taken place within the WSA, but has not resulted in any actual mining development. As a result of the low volume and discontinuous nature of the deposits, the potential for mineral development is considered to be low.

2. Summary of significant new mineral resource data collected since the nonsuitability recommendation, which should be considered in the final recommendation: Neither the U.S. Bureau of Mines nor

that U.S. Geological Survey has conducted a mineral survey for the WSA. Because the entire WSA is considered to have low mineral potential, no mineral resource potential map was prepared. According to BLM records dated March 25, 1988, no unpatented mining claims, mineral sales or leases exist within the WSA.

E. Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all the alternatives considered.

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	There will be slight impacts to wilderness values from anticipated timber harvest activities, test planting to increase forage production for livestock, and continued low level of motorized recreation use within the WSA. Up to 613 acres of timber land could be harvested for 17 MMbf. The perception of naturalness will be reduced on up to 1,500 acres and solitude will be periodically disrupted as a result of timber harvest activities including road construction. A test planting of native and naturalized species to increase forage production will have a short-term impact on wilderness values with up to 160 acres of the perception of naturalness impaired. There will be only negligible impacts, primarily on solitude, as a result of up to thirty visitor days of motorized recreation use and infrequent landowner use of Big Butte Road for access.	Wilderness designation would have a slight positive benefit to wilderness values. As a result of precluding timber harvesting on 613 acres and a test planting to increase forage production as well as eliminating thirty visitor days of motorized recreation use, wilderness values would be retained and slightly enhanced, particularly naturalness and solitude. dditionally, long-term protection from unanticipated future actions that could result in potential adverse impacts would be provided.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Impacts on Timber Harvesting	There will be no impact on timber harvesting. All 17 MMbf on approximately 613 acres will be available for harvesting.	Harvesting of up to 17 MMbf of timber on 613 acres would be foregone under wilderness designation. This 17 MMbf represents less than 5% of the Ukiah District's timber base. There would be a minor impact on timber harvesting as a result of wilderness management.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Draft EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Several comments were received during the wilderness inventory phase. These comments addressed the area's naturalness and man's imprint on the landscape from past road building, grazing, timber harvest and presence of man-made structures.

During the study phase, a public hearing was held on December 2, 1987 in Ukiah, California. In response to both oral and written comments, two issues were identified for detailed analysis in the Draft EIS - impacts on wilderness values and impacts on timber harvest.

The five written letters received during the comment period related specifically to the protection of the 613 acres of old-growth Douglas-fir forest as a sanctuary for wildlife species such as spotted owls, golden eagles, peregrine falcons, mountain lions and black bear.

No State and County agency or political jurisdictional entity comments were received specific to this WSA. The U.S. Forest Service concurred with the Bureau's no-wilderness recommendation.

Thatcher Ridge

CA-050-212

THATCHER RIDGE WILDERNESS STUDY AREA (WSA)

(CA-050-212)

1. THE STUDY AREA --- 17,107 acres

The Thatcher Ridge WSA is located approximately 160 miles north of San Francisco in northeastern Mendocino County. The WSA includes 16,918 acres of Bureau of Land Management (BLM) lands and 189 acres of private land. There is no split estate or State inholdings. (see Map 1 and Table 1).

The WSA is bounded on the east and south by the Mendocino National Forest, USFS, and on the north and northeast by private property. It is bounded on the west by private property, with Elk and Sanhedrin Creeks just outside the southwest boundary.

The WSA is comprised of several long, brush covered ridges (Long Doe, Horse Pasture, Thatcher and Bentley), with the WSA running in a north-south direction. The topography consists of relatively flat ridge tops with westerly-facing, brush-covered slopes. Elevations run from about 1,200 feet to Thatcher Buttes 4600 feet. Vegetation varies from dense chaparral/chamise to a few small open grassland/oak meadows. There are some patches of timber along the higher elevations of Hayshed and Thatcher Creeks. There are two small timber-covered areas, containing approximately five MMbf of timber. The lower elevations, along Elk Creek and Sanhedrin Creek, are winter range for deer.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Suitability recommendations were analyzed in the Draft and Final Environmental Statement for the Eden Valley/Thatcher Ridge WSAs. A summary of the area's wilderness values was included in the final EIS. Two suitability recommendations were analyzed in the EIS: all wilderness and no wilderness.

2. RECOMMENDATIONS/RATIONALE

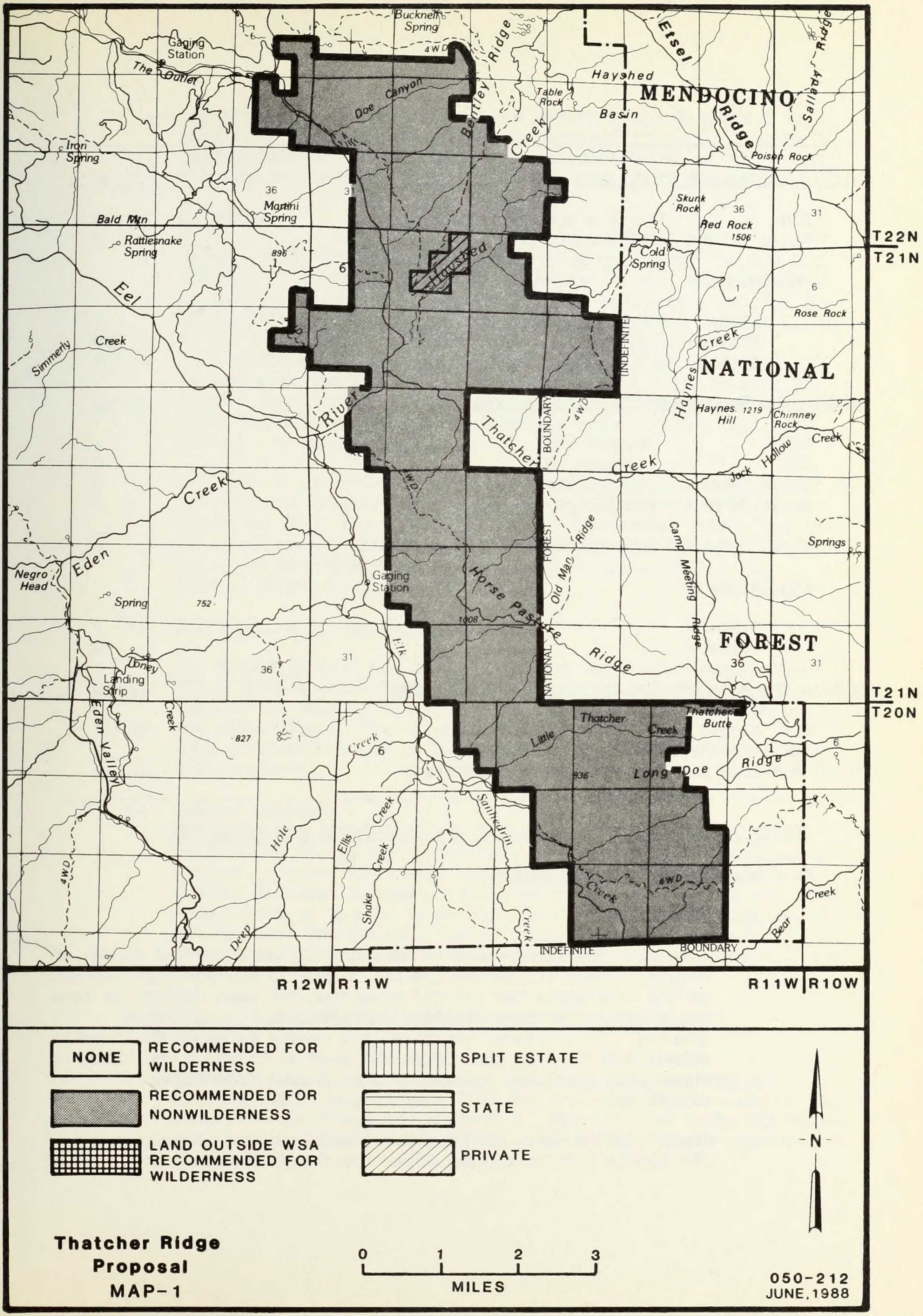
0	acres recommended for wilderness
16,918	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in the WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally-preferred alternative as it would result in the least change from the natural environment over the long-term. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The primary rationale for this recommendation is the area's low wilderness values. This WSA consists of two distinct types of topography. The north western portion of the area contains the Eel River and the majority of the area's topographic relief. The southern two-thirds consists of a series of chaparral/chemise covered ridges. Except for the river corridor, the area does not have outstanding wilderness values. There are no special or distinguishing features within this southern two-thirds which would add to the National Wilderness Preservation System. In addition, this southern portion has been affected by the works of man. Portions of the area have been planted with non-native grasses, and eleven miles of firebreaks extend down most of the ridges. Several of these firebreaks traverse the slopes and are visible from the higher elevations. The net effect of these impacts in combination with limited opportunities for solitude or primitive recreation is an area with low value for designation as wilderness.

The adjacent U.S. Forest Service (USFS) lands were dropped from wilderness consideration in the 1984 California Wilderness Act. The USFS agrees with this nonsuitable recommendation for the Thatcher Ridge WSA.

The river's values have been recognized and are protected by the Wild and Scenic River designation.



Thatcher Ridge Proposal
MAP-1

050-212
JUNE, 1988

Table 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	16,918
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		189
Total		17,107
Within the Recommended Wilderness Area		**Acres**
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		**Acres**
BLM	(surface and subsurface)	16,918
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		16,918

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

A. Wilderness Characteristics

1. Naturalness

Generally the WSA appears to have been affected by the forces of nature. Human influences are noticeable in the southern portion of the area where the natural condition has been changed by land manipulations such as drilling and planting of non-native grasses. In addition, approximately eleven miles of firebreaks extend down most of the ridges and several traverse the slope. These firebreaks are noticeable when viewed from higher elevations.

The WSA contains two major canyons and a number of smaller ones. The middle fork of the Eel River has formed a canyon that is over

600 feet deep. The river corridor is steep and rugged and is an excellent example of land that has retained its natural character. This portion of the Eel River has been designated as "wild" under the Wild and Scenic Rivers Act.

2. Solitude

Opportunities for solitude are available throughout the WSA but are best along the Middle Fork of the Eel River. Thatcher Creek, Hayshed Creek, and Doe Canyon Creek also offer opportunities for solitude but their proximity to firebreaks and the occasional use of these firebreaks by off-highway vehicles limit these opportunities. It becomes increasingly difficult to find seclusion in the WSA from the midslope of the ridge forming the western boundary of the WSA to the top of the ridge because of the lack of vegetative screening caused by several fires that have occurred in recent years.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive or Unconfined Recreation

The Middle Fork of the Eel River offers excellent opportunities for primitive recreation such as white water boating; sport fishing for salmon, steelhead, and trout; wildlife observation; and backpacking. The remainder of the WSA offers limited opportunities because of its narrow configuration and very steep, brushy slopes.

4. Special Features

Bald eagles and peregrine falcons, both classified as endangered species, migrate throughout the area. One pair of peregrine falcons is known to nest in the area to the west of the WSA. The Middle Fork of the Eel River flows for five miles through the WSA and has been designated a "Wild" river under the Wild and Scenic Rivers Act. The Eel is a major salmon and steelhead spawning and nursery river.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 16,918 acres of the Pacific Forest/Chaparral ecosystem. The Thatcher Ridge WSA would not increase the diversity of the types of ecosystems represented in the NWPS.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	Areas	Acres	Areas	Acres
	NATIONWIDE			
Pacific Forest/Chaparral	2	53,770	2	7,766
	CALIFORNIA			
Pacific Forest/Chaparral	1	4,745	2	7,766

2. Expanding the opportunities for solitude and primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of three major population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Santa/Rosa/Petaluma	10	888,579	12	134,167
Chico	16	1,286,873	13	430,822
Redding	14	1,236,503	11	344,633

3. Balancing the geographic distribution of wilderness areas: There are two BLM WSAs within 50 air miles that are recommended for wilderness designation - the Chemise Mountain WSA and the King Range WSA in Southern Humboldt County on the Pacific Coast.

C. Manageability

The Thatcher Ridge WSA is manageable as wilderness.

Private property, if developed, could detract from wilderness values, depending on the type and extent of development.

The management of the Wild and Scenic Eel River will not be particularly enhanced by wilderness designation.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at the time of preliminary nonsuitability recommendation: The energy and minerals potential of the Thatcher Ridge WSA is addressed in the East Mendocino Management Framework Plan and in the Eden Valley/ Thatcher Ridge Wilderness Study Areas final Environmental Impact Statement (EIS). Due to the fact that the area was deemed unsuitable in this EIS, no BLM Geology-Energy-Minerals (G-E-M) report was prepared. In lieu of a G-E-M report, a literature search was made in order to verify the findings of the EIS.

   The geology, mineralization and lack of development in the Thatcher Ridge WSA indicate a low potential for mineral resources. The area has potential for the occurrence of copper and manganese and is classified as being prospectively valuable for geothermal resources. Also, a small part of the west side of the WSA is classified as being prospectively valuable for oil and gas. While there is potential for mineral resource occurrence there is no indication that large or extractable deposits are present in the WSA. The U.S. Geological Survey (USGS) and U.S. Bureau of Mines reports indicate no significant mineral deposits in surrounding U.S. Forest Service (USFS) lands. California Division of Mines and Geology indicate little industry interest in the general area.

   The USGS, on February 9, 1967, classified lands in the Thatcher Ridge WSA as being prospectively valuable for geothermal resources. Geothermal indications in the area are scarce. There has been no known geothermal exploration, development or production in the WSA.

   The UGGS, in November 1982, classified a small part of the west side of the WSA as being prospectively valuable for oil and gas. There has been no known exploration, development or production of oil and gas in the WSA. The WSA has little potential for oil and gas.

   In summary, all mineral resource potentials within the Thatcher Ridge WSA are considered to be low.

2. Summary of significant new mineral resource data collected since the nonsuitability recommendation, which should be considered in the final recommendation: No U.S. Geological Survey or U.S. Bureau of Mines mineral surveys were conducted for the Thatcher Ridge WSA because the area was recommended as nonsuitable for wilderness designation. Because the mineral resource potential for the entire WSA is considered low, no map depicting mineral potential was prepared. As of January 13, 1988, there were no unpatented mining claims recorded in the WSA. There are no known saleable mineral deposits in the WSA. As of February 11, 1988, there were no oil and gas lease applications in the WSA.

E. Impacts on Resources

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or non-designation of the entire area as wilderness (for a full explanation of this summary, refer to the Eden Valley/Thatcher Ridge Wilderness Final Environmental Impact Statement).

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Impact on Wilderness Values	OHV use of less than 75 visitor days/year, timber harvest on 670 acres, and mechanized fire suppression activities would have a minor impact on the area's wilderness values. Prescribed burns would have a short-term impact on the natural scene but would benefit solitude and peregrine falcon foraging habitat. Wilderness values would also be enhanced by 200 acres of commercial tree plantings.	The elimination of 75 visitor days of OHV use, timber harvesting and mechanized fire suppression activities would have a minor positive impact on wilderness values for the most part. The prohibition of 200 acres of planting would have a minor localized negative impact on the opportunities for solitude and primitive or unconfined recreation.
Impact on Riparian Habitat	Full fire suppression with mechanized equipment, continued OHV use, and timber harvest plus the noise and surface disturbance associated with these uses have a minor impact on three miles of riparian habitat. Habitat would benefit from prescribed burning because of the reduction of fuel loads and the incidence of castastrophic wildfires.	Elimination of 75 visitor days of OHV use, recreation development, and prohibition of timber harvesting on 670 acres reduce human influence and have a minor positive impact on riparian habitat.
Impact on Endangered Species	No significant impact. Projected OHV use and the noise associated with this use would have a negligible impact on bald eagles	Designation would eliminate the projected 75 OHV visitor use days and benefit endangered species. Prescribed

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
	and the pair of peregrines nesting outside the WSA. Timber harvest would have a minor, short-term impact but would benefit peregrines by increasing their foraging area.	burning activities would especially benefit peregrine falcons, increasing foraging range.
Impact on Anadromous Fish Spawning and Nursery Streams	Prescribed burns and limited timber harvest activities may cause erosion and siltation which would have a minor, short-term negative impact on three miles of anadromous fish spawning and nursery streams. Effects would be minimized by required management actions regulating harvest.	The elimination of 75 visitor days of OHV use on 11 miles of trails and firebreaks and 670 acres of timber harvesting would reduce the possibility of increased erosion from surface disturbance and siltation and having a small positive impact on anadromous fish spawning and nursery streams These streams may be impacted by prohibiting tree planting in disturbed areas in the drainage.
Impact on Timber Management	670 acres (5 MMbf) of Douglas-fir foregone. Replanting of 200 acres prohibited.	5 MMbf of Douglas-fir foregone. Replanting of 200 acres prohibited.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Several comments were received during the wilderness inventory phase. These comments generally supported the Bureau's decision to include the area for further study and recommended all-wilderness.

During the study phase, a public hearing was held in Ukiah, California. During the public hearing and comment period, 20 written comments were received, and nine individuals testified at the hearing. Ninety-five percent of the comments supported all-wilderness.

The Mendocino County Board of Supervisors endorsed the preferred alternative (no-wilderness), and the Mendocino County Public Works requested more clarification on possible impacts to county roads if the area were added to the NWPS.

The National Park Service questioned the potential impacts from logging and OHVs on the wild status of the Eel River and on cultural resources.

During informal discussions with the U.S. Fish and Wildlife Service (FWS), concerning WSAs where endangered species are present, FWS indicated their belief that prior to any management actions that may affect any potentially eligible threatened or endangered species, Section 7 consultation would be required.

The Environmental Protection Agency (EPA) categorized the DEIS EC-2, environmental concerns - insufficient information, because mitigation measures for potential impacts to water quality and beneficial uses were not fully addressed.

Eden Valley

CA-050-214

EDEN VALLEY WILDERNESS STUDY AREA (WSA)

(CA-050-214)

1. THE STUDY AREA --- 6,485 acres

The Eden Valley WSA is located in eastern Mendocino County, California, approximately 100 miles north of San Francisco. The WSA includes 6,166 acres of Bureau of Land Management (BLM) and 319 acres of private land (see Map 1 and Table 1). There are no split estate or State-owned lands. The WSA boundary follows property lines and is surrounded by private properties except for some U.S. Forest Service (USFS) lands on the south. The area lies between Elk Creek and Bennett Valley on the east and Eden Valley and Eden Valley Creek on the west. The WSA is bounded by a small parcel of BLM land and private land to the north.

Approximately 95 percent of the WSA's vegetation was destroyed by a wildfire in August 1987. While the area's vegetation has been changed by fire, it is expected that vegetation typical of the area (thick brush, a few grassy meadows, hardwoods and a few cypress mixed with conifers) will soon re-establish. Deep Hole Canyon offers some topographic relief, with the rest of the WSA showing little relief.

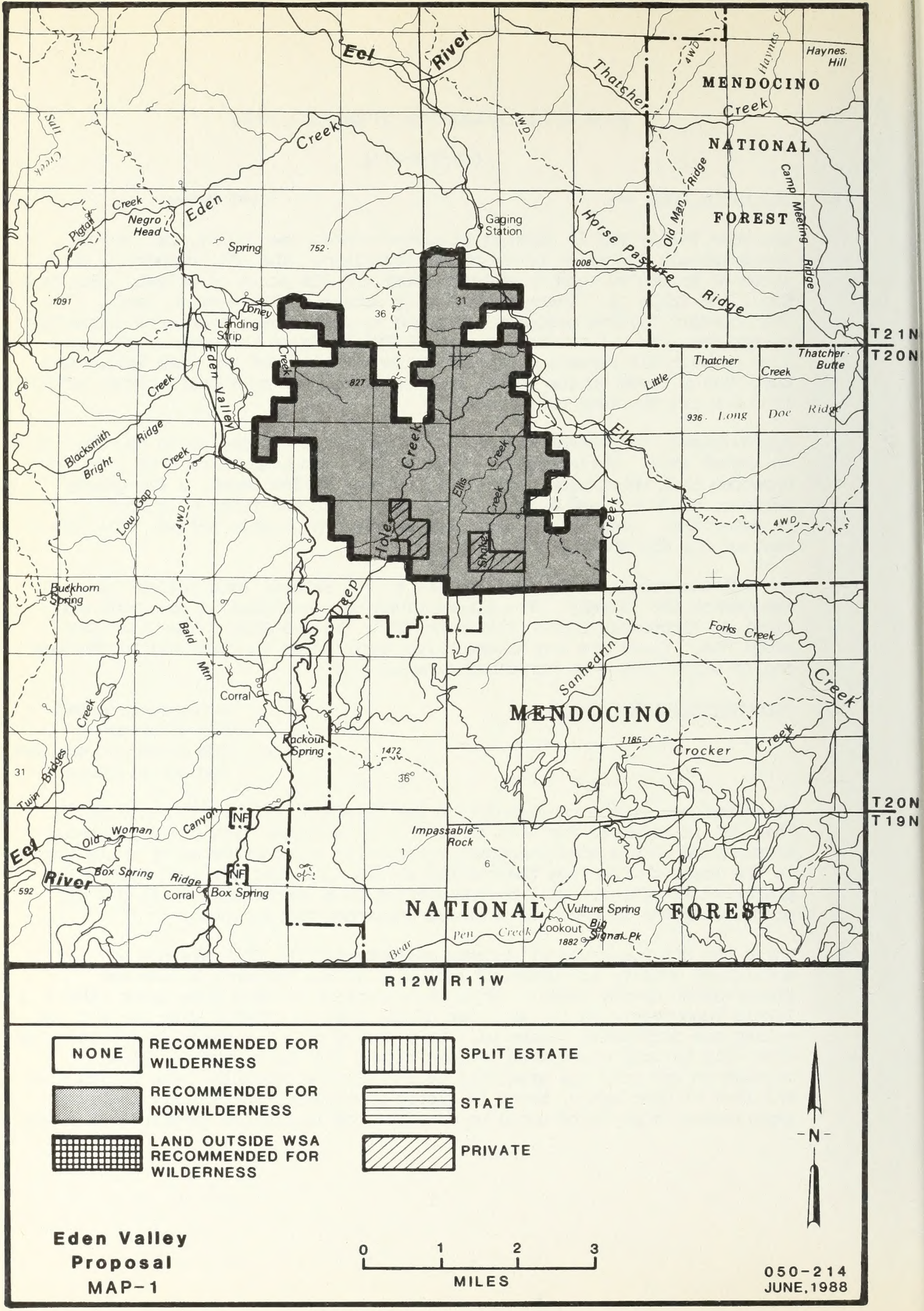
The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two alternatives were analyzed in the Draft and Final Environmental Impact Statement (EIS) for the Eden Valley/Thatcher Ridge WSA. There are two alternatives analyzed in the EIS: all wilderness and no wilderness (the preferred alternative).

2. RECOMMENDATION/RATIONALE

0	acres recommended for wlderness
6,166	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is the environmentally-preferable alternative as it would result in the least change from the natural environment over the long-term. The preferred alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

While the WSA possesses wilderness characteristics, they are not of sufficient quality to recommend inclusion in the National Wilderness Preservation System (NWPS). With the exception of Deep Hole Creek, there is little topographic relief and most of the area is covered with heavy brush, making use difficult. There will be a period of a few years (5-10) when the area will be more accessible because of the 1987 burn, but as thick vegetation returns, the area will be largely inaccessible. Due to its size and lack of open space, there is little opportunity for quality solitude experiences; most users would be concentrated in limited geographical areas.



Eden Valley Proposal
MAP-1

There are no unique values or special features that set this WSA apart from other public lands.

TABLE 1 - Land Status and Acreage Summary of the Study Area

		Acres
Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	6,166
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		319
Total		6,485
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	6,166
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		6,166

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATION

A. Wilderness Characteristics

1. Naturalness: The Eden Valley WSA generally appears to have been affected primarily by the forces of nature, with human influences unnoticeable for the most part. One major canyon is within its border--Deep Hole Creek. This canyon which contains steep, forested terrain, averages between 200 feet and 400 feet deep.

Most of the existing human imprints in the Eden Valley WSA are the five miles of firebreaks and rugged Jeep trails along several ridges and dispersed throughout the area. These intrusions are minor imprints on the landscape and are substantially unnoticeable.

2. Solitude: Opportunities for solitude are available throughout the WSA because of the topographic variations and vegetative screening. Deep Hole Creek, which bisects the WSA in a north-south direction, offers the best opportunity for seclusion and a feeling of isolation because of its steep hillsides and the abundance of Douglas-fir along the drainage.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive or Unconfined Recreation: The area offers limited opportunity for users to participate in primitive or unconfined recreational activities such as hiking, fishing and hunting. Much of the area is covered with very dense, low-lying brush forming natural barriers that restrict human movement within the area. Visual amenities are minimal due to topographic uniformity and landform characteristics.

4. Special Features: Bald eagles and peregrine falcons, both classified as endangered species, migrate through the area. One pair of peregrine falcons is known to nest in the area north of the WSA. Elk Creek, located in the northeastern portion of the WSA, is a major salmon and steelhead spawning and nursery tributary. Deep Hole Creek is a productive, small stream, primarily for steelhead and resident rainbow trout.

B. Diversity in the Natural Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 6,166 acres of the Pacific Forest/Chaparral ecosystem. Wilderness designation of this WSA would not add an ecosystem not represented in California. It is represented by several areas already included in the NWPS.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
Pacific Forest/Chaparral	2	53,770	2	18,518
	CALIFORNIA			
Pacific Forest/Chaparral	1	4,745	2	18,518

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major populations centers. The WSA is within a five-hour drive of three major population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Acres		Other BLM Studies	
	areas	acres	areas	acres
California				
Santa Rosa/Petaluma	10	888,579	12	134,167
Chico	16	1,286,873	13	430,822
Redding	14	1,236,503	11	344,633

3. Balancing the geographic distribution of wilderness areas: The Eden Valley WSA would not contribute to balancing the geographic distribution of areas within the NWPS. The Yolla-Bolly-Middle Eel Wilderness and North Fork Wilderness lie 21 and 35 miles, respectively, to the north, and Snow Mountain Wilderness is 15 miles to the southeast.

C. Manageability

The Eden Valley WSA is manageable as wilderness. Because of lack of access, both administrative and public use will be low, and Bureau presence will be held at a minimum. The lack of exploitable resources considerably reduces the likelihood of impairment of wilderness values. The proximity of private land could result in some use of off-highway vehicles in the area. However, this use will be minimal due to the lack of roads and trails, and dense vegetation. The minor grazing (27 AUMs) and lack of range improvements do not affect the area's manageability for wilderness.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of preliminary nonsuitability recommendation: The energy and minerals potential of the Eden Valley WSA is addressed in the Eden Valley/Thatcher Ridge Wilderness EIS (1987) and the East Mendocino Management Framework Plan (1975). Due to the fact that the WSA was deemed non-suitable in the EIS, no BLM Geology-Energy-Minerals (G-E-M) report was completed. In lieu of a G-E-M report, a literature search was made in order to verify the finding of the EIS.

   The geology, mineralization and lack of development in the Eden Valley WSA indicate a low potential for mineral resources. Based on known occurrences of minerals from U.S. Bureau of Mines and U.S. Geological Survey (USGS) studies on adjacent U.S. Forest Service land, it has been determined that the area has potential for the occurrence of copper, manganese, chromite, platinum and coal. However, there is no indication that large or extractable deposits are present in the WSA. Historically, there has been no exploration or industry interest in any of these minerals within the WSA. The low quality of the coal and the size of the deposit do not make it economically feasible to mine. As of January 23, 1988, there were no mining claims recorded in the WSA.

   The USGS, on February 9, 1967, classified the lands in the eastern half of the Eden Valley WSA as being prospectively valuable for geothermal resources. No hot springs or other geothermal indicia are known to occur in the immediate area. As of February 11, 1988, there were no geothermal lease applications within the WSA. There has been no geothermal exploration, development, or production in the WSA.

   As of February 11, 1988 there were no lease applications within the WSA for oil and gas. The WSA has little to no potential for oil and gas. There are no known saleable mineral deposits in the WSA.

   In summary, all mineral resource potentials within the Eden Valley WSA are considered to be low.

2. Summary of significant new mineral resource data collected since the nonsuitability decision which should be considered in the final recommendation: Due to the recommendation of nonsuitability for wilderness designation neither the U.S. Bureau of Mines nor the U.S. Geological Survey has conducted a mineral survey for the Eden Valley WSA. Because the entire WSA is considered to have low

mineral potential, no mineral resource potential map was prepared for the WSA. According to the BLM records dated March 25, 1988, no unpatented mining claims exist within the WSA.

E. Impacts on Resources

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or nondesignation of the entire area as wilderness. (For a full explanation of this summary, refer to the Eden Valley-Thatcher Ridge Wilderness Final Environmental Impact Statement.)

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (No-wilderness/NO ACTION)	ALL-WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	As a result of the projected 50 visitor-days annually in off-highway vehicle use, prescribed burns on approximately 150 acres and the small-scale mining development, there would be a minor impact on naturalness, opportunities for solitude, and primitive or unconfined recreation on less than 5% of the area's 6,166 acres. There would be no significant impact on the Deep Hole Creek Canyon or on the bald eagle or peregrine falcon.	All wilderness values in the area would be retained. The area's naturalness and opportunities for solitude and primitive or unconfined recreation would receive a minor benefit from the closure of the area to 25 visitor-days of OHV use and mineral exploration/development.
Impact on Sensitive Plant Species Habitat	Full fire suppression and the projected 50 visitor days of OHV use and the surface disturbances associated with these uses would have a slight adverse effect but would be mitigated by excluding these surface-disturbing activities once a field inventory is completed.	Designation would have a very minor positive impact by precluding OHV use and full fire suppression. Increased non-motorized use would have no significant impact on these species.
Impacts on Endangered Species	Bald eagles and peregrine falcons would be negligibly impacted by the noise and surface disturbance associated with occasional OHV and nonmotorized use. Prescribed burns would have a very minor short-term impact, but would enlarge foraging areas, thereby enhancing peregrine falcon habitat.	Minor beneficial impact on the bald eagles and peregrines from closure of area to vehicles and mining activity.

F. Local Social and Economic Conditions

No local social or economic considerations were identified in the final EIS. Therefore, no further discussion of this topic will occur in this document.

Rocky Creek
Cache Creek

CA-050-317

ROCKY CREEK - CACHE CREEK WILDERNESS STUDY AREA (WSA)

(CA-050-317)

1. THE STUDY AREA --- 35,019 Acres

The Rocky Creek - Cache Creek WSA includes 33,561 acres of BLM administered public lands, four parcels of privately owned land totaling approximately 1,275 acres and 183 acres of State lands. There are no split estate lands (see Map 1 and Table 1).

This WSA is bounded by private or state owned lands. Except for two short portions of Jeep road along the south and southeast boundary, the WSA boundary follows property lines.

The prominent feature of the WSA is Cache Creek which runs in a west-to-east direction and forms a rugged, steep-sided canyon through most of the study area. The steep canyon walls occasionally open to broad, grassy openings with scattered valley oaks. Numerous steep, side drainages also meet along Cache Creek, including Trout Creek and Rocky Creek. The remainder of the WSA is dominated by rolling, chaparral covered hills. Elevations range from 800 feet along Cache Creek to 3,196 feet along the ridge summits.

Approximately 25 percent of the public land within the WSA has been designated an Area of Critical Environmental Concern (ACEC)/Research Natural Area (RNA).

The WSA lies entirely within the Clear Lake National Cooperative Land and Wildlife Management Area, established June 7, 1962, calling for cooperative management by the BLM and California Department of Fish & Game.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Clear Lake Resource Area Management Framework Plan Amendment/Environmental Impact Statement (EIS) which was final in October 1986. An additional 1526-acre tract adjacent to the WSA along Cache Creek and in Wilson Valley, acquired after the wilderness inventory, was included in the study process under authority granted in Section 202 of FLPMA. There were three alternatives analyzed in the EIS: 1) all wilderness; 2) partial wilderness which would have designated 91 percent of the WSA as wilderness; and, 3) no wilderness, which is the proposed action.

2. RECOMMENDATIONS AND RATIONALE

0 acres recommended for wilderness
33,561 BLM acres recommended for non-wilderness

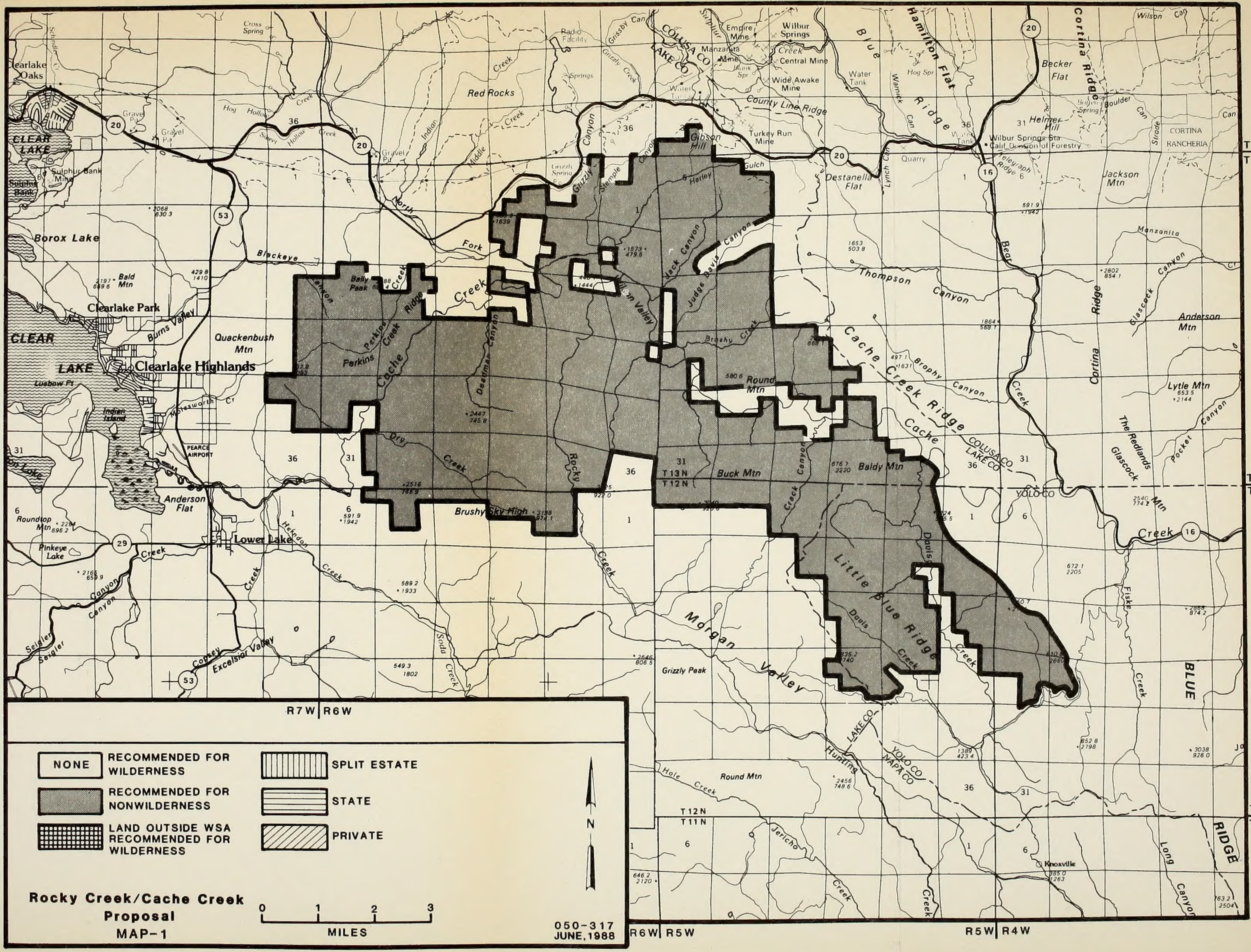
No wilderness is the recommendation for this WSA, as well as the acquired acrreage. The entire acreage in this WSA is released for uses other than wilderness. While the all-wilderness alternative is the environmentally preferable alternative, any development that may occur within the WSA boundary will be implemented in a manner to avoid or minimize environmental impacts.

The decision attempted to balance the area's values with the needs for intensive management not permitted if designated wilderness. In the end, the final nonsuitable recommendation is based on the following: 1) the existing mining claims could impair the area's wilderness values; 2) wildlife species of special concern in the area require aggressive wildlife management, and, 3) BLM can manage the special resources of the area with other designations.

Approximately one-third of the WSA is covered with over 550 mining claims. Some of these claims could be found to possess valid existing rights. Claims with valid existing rights can be developed consistent with wilderness designation and could impair wilderness values. Development of these claims could significantly alter BLM's capability to manage the area as wilderness.

The area supports a herd of 500 Tule elk, a California sensitive species. Management of these elk by the State Department of Fish & Game requires aggressive actions such as habitat manipulation, conversion of areas dominated by thistle to grasses, and development of a dependable water system. Wilderness designation would prohibit completion of these projects which cannot be done without mechanized/motorized equipment.

To protect the unique values of Cache Creek, nearly 8,200 acres of the WSA have been designated as an Area of Critical Environmental Concern. This will both protect resources and allow continued management of the area's unique values.



Rocky Creek/Cache Creek Proposal
MAP-1

050-317
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

		Acres
Within Wilderness Study Area		
BLM	(surface and subsurface)	33,561
Split Estate	(BLM surface only)	0
Inholdings		
State		183
Private		1,275
Total		35,019
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	33,561
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		33,561

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA generally retains its natural condition. However, since the completion of the Intensive Inventory, approximately 2.5 miles of firebreaks 30-feet wide were constructed to control two large wildfires in 1981. While visible, these firebreaks are slowly regaining their natural state. In the Perkins Creek area, grazing lease developments have led to vegetative conversion and development of roads, gates, cattle guards, water development and fences. These grazing operations would be allowed under wilderness designation. Approximately two percent of the WSA's naturalness has been adversely impacted.

2. Solitude: The WSA possesses outstanding opportunities for solitude. The size, configuration, mixed vegetation patterns, and broken topography all promote a sense of solitude and seclusion in the WSA.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation The Cache Creek WSA offers excellent opportunities for primitive and unconfined recreation. The WSA size and topographic features (creeks, canyons, ridge tops) allow the hiker ample opportunity to enjoy the area's near-natural conditions. Non-motorized white-water rafting is available and the scenery of this low elevation country is unmatched in northern California.

4. Special Features The WSA offers five important special features. These are: 1) the large winter concentration of Bald Eagles (50-70 eagles, an endangered species) along Cache Creek; 2) opportunities for white-water rafting found within the river corridor; 3) the Cache Creek Tule elk herd (a California sensitive species) of some 500 animals, is second only to the Owens Valley herd in numbers; 4) recent inventories in the Wilson Valley area indicate extensive use by early Americans. These sites are unique in that they are among the only undisturbed cultural sites in northern California; and, 5) the large block of undisturbed vegetation found within the Northern California Chaparral Research Natural Area (RNA). There are no other stands of this size that are largely free of man's influence, thus providing an opportunity for research.

B. Diversity in the National Wilderness Preservation System

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 33,561 acres of the California Chaparral/Chaparral ecosystem. Wilderness designation of this WSA would add an ecosystem not represented in California. While there are ecosystems of similar composition, the variations of vegetation, soils and water sources are unique to this area.

TABLE 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
NATIONWIDE				
California Chapparal/Chapparal	17	462,256	10	55,056
CALIFORNIA				
California Chapparal/Chapparal	17	462,256	10	55,056

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major populations centers: The WSA is within a five-hour drive of seven major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

TABLE 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Chico	16	1,286,873	13	430,833
Redding	14	1,236,503	11	344,633
Santa Rose/Petaluma	10	888,579	12	134,167
Vallejo/Fairfield/Napa	44	4,832,667	74	2,100,862
Sacramento	46	5,001,817	87	2,479,541
San Francisco/Oakland	39	4,473,002	39	565,614
Yuba City	44	4,951,805	85	2,459,500

3. Balancing the geographic distribution of wilderness areas: There are no WSAs recommended as suitable within 50 air miles of this WSA. The Snow Mountain Wilderness Area, administered by the Mendocino National Forest (40 air miles to the north) is the nearest designated wilderness. Pt. Reyes National Seashore Wilderness administered by the National Park Service, lies 65 air miles to the southwest.

C. Manageability

The Rocky Creek-Cache Creek WSA is manageable as wilderness. However, the existence of numerous mining claims and geologic formations that extend into the WSA could preclude approximately 50 percent of the area to be managed as wilderness, if developed.

The potential for development of these claims is judged to be moderate (Energy and Mineral Resource Values section). The same formation is found here that supports Homestake Mining Company's McLaughlin Mine, two miles to the southeast of the WSA. It is anticipated that, if developed, approximately 400-600 acres would be used for open-pit mining, tailings and processing facilities. Road location and length could depend on the location of mining activities. Mining activities would be visible from a large portion of the WSA. Opportunities for solitude or primitive and unconfined recreation would be diminished, resulting in a large portion of the WSA becoming unmanageable as wilderness.

The California Department of Fish & Game has proposed to irrigate up to 20 acres in the Wilson Valley for forage for Tule elk during drought years and to encourage the migration of the elk from private lands north of Highway 20 where damage to crops is increasing. The need for vehicle access and physical facilities (pump, caretaker housing, etc), would conflict with wilderness management.

Grazing operations in the Perkins Ridge/Creek area and other outside influences would not significantly detract from the Bureau's ability to manage the area as wilderness.

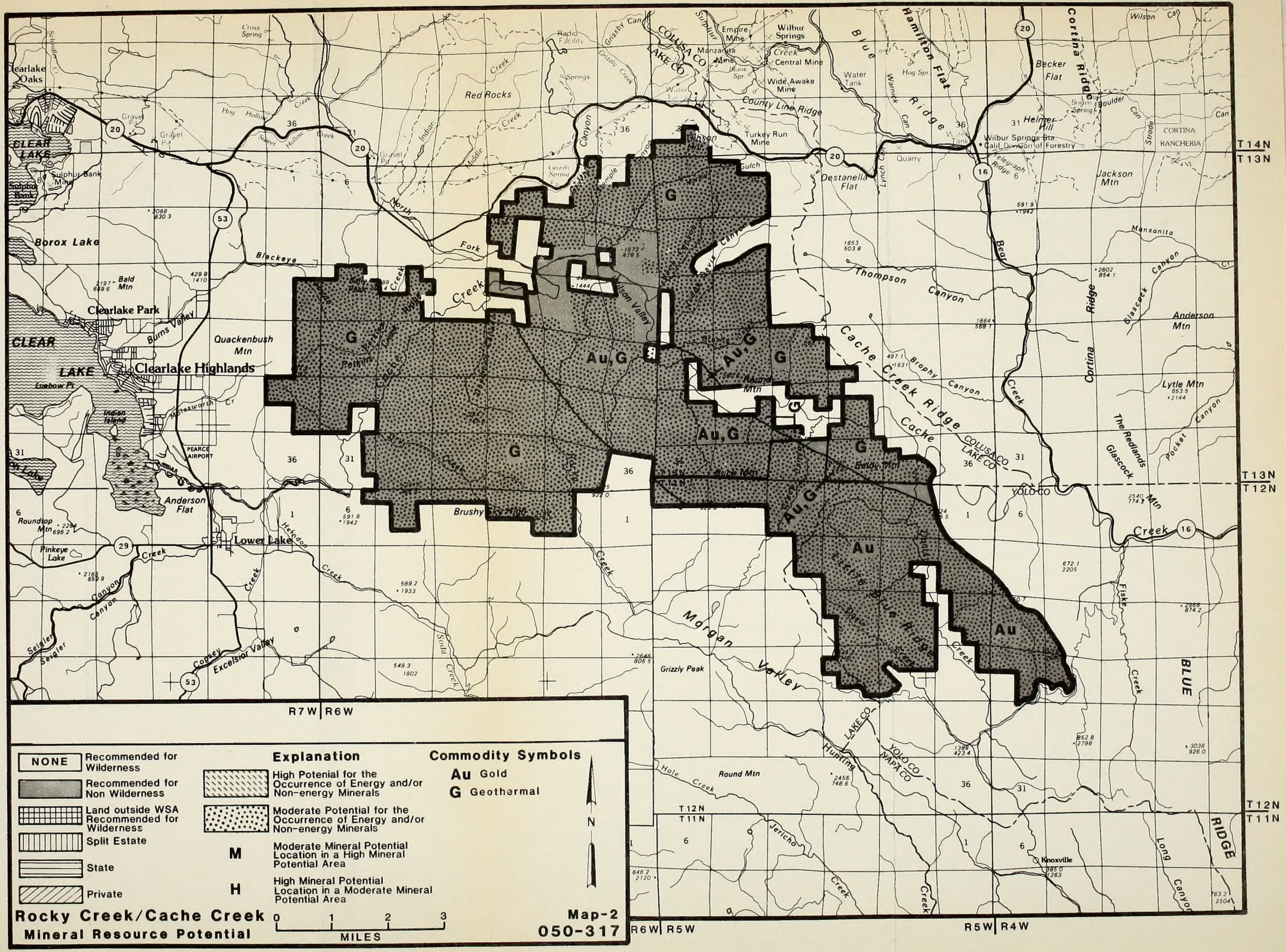
Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resources

1. Summary of information known at the time of preliminary nonsuitability recommendations: The energy and minerals potential of the Rocky Creek-Cache Creek WSA is addressed in the Clear Lake Wilderness EIS (1987) and the Clear Lake MFP (1984). Due to the fact that the WSA is recommended nonsuitable, no Geology-Energy- Minerals (G-E-M) report was prepared. In lieu of a G-E-M report, a literature search was made to determine the areas mineral potential.

From various information sources, it was determined the WSA contains deposits of, or occurrences of, mercury, gold, asbestos, placer chromite, magnesite, and sand and gravel. Small quantities of mercury were removed prior to and during World War II, with no production since. Ten mining claims (all for mercury) have been patented within the WSA. The potential for mercury mineralization in the WSA is low.

The potential for gold, based on the geologic structure common to the WSA and Homestake Mining Company's McLaughlin Gold Mine, two miles to the southeast is moderate (In 1987, the McLaughlin Gold Mine produced 189,000 troy ounces of gold). The potential of all other minerals in the WSA is low.



Rocky Creek/Cache Creek
Mineral Resource Potential

Map-2
050-317

G. Summary of WSA - Specific Public Comments

Several comments were received during the wilderness inventory phase. These comments generally supported the Bureau's decision to include the area for further study and recommend all-wilderness.

During the study phase, a public hearing was held in Ukiah, California. During the public hearing and comment period, 20 written comments were received, and nine individuals testified at the hearing. Ninety-five percent of the comments supported all wilderness.

The Mendocino County Board of Supervisors endorsed the preferred alternative (no wilderness), and the Mendocino County Public Works requested more clarification on possible impacts to county roads if the area were added to the NWPS.

Cedar Roughs

CA-050-331

CEDAR ROUGHS WILDERNESS STUDY AREA (WSA)

(CA-050-331)

1. THE STUDY AREA --- 6,117 acres

The Cedar Roughs WSA is located in Napa County immediately west of Lake Berryessa, California. The San Francisco Bay area lies about 100 miles to the south. The WSA contains 5,875 acres of Bureau of Land Management (BLM) land and one parcel of private land totaling 242 acres (see Map 1 and Table 1).

The WSA is surrounded by private land, nestling between Lake Berryessa to the east; Pope Valley to the north and west; Chiles Valley to the south and southwest; and, Elder Valley to the south. The boundary follows property lines.

The Cedar Roughs landform is generally a rounded ridgeline extending northwest to southeast. Iron Mountain, located in the southern portion of the study area, rises to over 2,200 feet in elevation. The only two perennial stream drainages, Hardin Creek to the west and Trout Creek to the east enter the WSA for a short distance. The most dominant natural feature is the Sargent cypress stand which comprises about 50 percent of the WSA, with most of the remainder either mixed chaparral or chamise-chaparral.

The area is designated as an Area of Critical Environmental Concern (ACEC/Research Natural Area (RNA) to recognize and manage the area's two special features--a small resident population of black bear and the Sargent cypress stand.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA), and is an amendment to the Clear Lake Resource Area Management Framework Plan. Two alternatives were considered in the EIS: all wilderness and no wilderness.

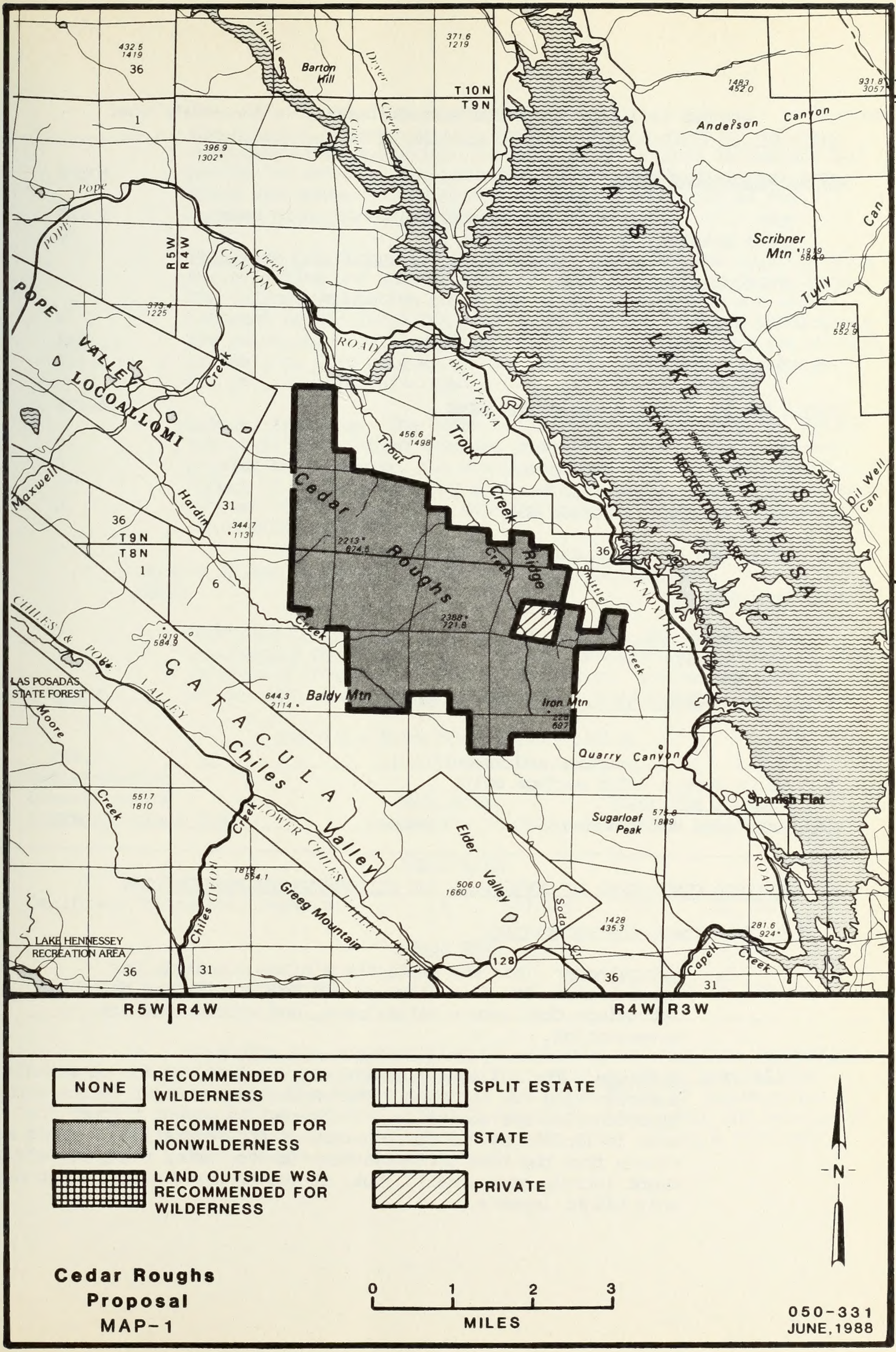
2. RECOMMENDATION AND RATIONALE

0 acres recommended for wilderness
5,875 BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long-term. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The WSA is recommended unsuitable because its overall wilderness characteristics are considered to be of low quality. The dense vegetation restricts human use to the outer fringes of the WSA, where the sights and sounds of outside activities will be more evident.

The management area's special features--the Sargent cypress stand and black bear population--are addressed in the ACEC activity plan. The plan prescribes management actions that provide adequate protection of these two species. The 2800-acre cypress stand is the largest example of this species and is unique in that it has not hybridized with other species of cypress found nearby.



Cedar Roughs
Proposal
MAP-1

050-331
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	5,875
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		242
Total		6,117
Within the Recommended Wilderness Area		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	5,875
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		5,875

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: This WSA meets the minimum standards for naturalness. The four miles of old Jeep trails are the only intrusions that reduce naturalness, and with no use are revegetating.

2. Solitude: The WSA meets the minimum requirements for outstanding opportunities for solitude. The vegetation on Cedar Roughs allows opportunities for seclusion. At present, movement through the area is limited by the dense nature of the vegetation. Sights and sounds from the Lake Berryessa area (boats, motor vehicles, etc.) might intrude occasionally, but, at two to three miles, would have only slight impacts.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: There are few opportunities for primitive and unconfined forms of recreation on Cedar Roughs. The uniform vegetation cover and mild topography do not offer interest or challenge for most users. Sport wildlife populations are relatively low, and there are no lakes and streams for fishing or boating. The unique cypress stand is of botanical interest, but only to a relative few.

4. Special Features: The Cedar Roughs WSA contains only two special features: the Sargent cypress stand and a resident black bear population. However, the black bear population is not significant enough to be noticeable by most visitors to the area. The Sargent cypress stand, comprising some 2800 acres, is the largest existing stand within California.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Accessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 5,875 acres of the California Chaparral/Chaparral ecosystem. Wilderness designation of this WSA would not add an ecosystem to the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
California Chaparral/Chaparral	17	462,256	10	81,335
	CALIFORNIA			
California Chaparral/Chaparral	17	462,256	10	81,335

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major populations centers. The WSA is within a five-hour drive of twelve major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS Acres areas	NWPS Acres acres	Other BLM Studies areas	Other BLM Studies acres
California				
Chico	16	1,286,873	13	430,833
Merced	33	3,957,550	25	348,753
Modesto	36	4,126,963	81	1,722,326
Redding	14	1,236,503	11	344,633
Sacramento	46	5,001,817	87	2,479,541
San Francisco/Oakland	39	4,473,002	39	565,614
San Jose	27	3,765,512	29	352,748
Santa Rosa/Petaluma	10	888,579	12	134,167
Stockton	35	4,061,833	46	601,496
Vallejo/Napa/Fairfield	44	4,832,667	74	2,100,862
Yuba City	44	4,951,805	85	2,459,500
Nevada				
Reno	39	4,647,230	175	6,904,809

3. Balancing the geographic distribution of wilderness areas: The Cedar Roughs WSA would not contribute to balancing the geographic distribution of areas within the National Wilderness Preservation System (NWPS). The U.S. Forest Service (USFS) Snow Mountain lies some 60 air miles to the north, and the National Park System Pt. Reyes National Seashore Wilderness lies some seventy air miles to the southwest.

C. Manageability

The Cedar Roughs WSA is manageable as wilderness. There are no intrusions that would preclude management of the area as wilderness. There is one parcel of private land in the eastern portion of the WSA with little likelihood of development.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resources

1. Summary of information known at the time of preliminary suitability recommendation: The Cedar Roughs WSA has low potential for mineral resources. There are no mining claims or evidence of mineral exploration or development in the WSA. There are no geothermal or oil and gas lease applications in the WSA. The U.S. Geological Survey on February 9, 1967 classified the lands in the area, which include the WSA, as being prospectively valuable for geothermal resources. This classification was based

upon the geology of the area. The potential for geothermal, based upon this USGS classification, is considered to be low. There is no present production of any mineral or geothermal resources in the WSA.

In summary, all mineral and geothermal potentials are low in the WSA.

2. Summary of significant new mineral resource data collected since the suitability recommendation which should be considered in the final recommendation: No U.S. Geological Survey or U.S. Bureau of Mines mineral surveys were conducted for the Thatcher Ridge WSA because the area was recommended as nonsuitable for wilderness designation. Because the mineral resource potential for the entire WSA is considered low, no map depicting mineral potential was prepared. As of January 23, 1988, there were no unpatented mining claims recorded in the WSA. There are no known salable mineral deposits in the WSA. As of February 11, 1988, there were no oil and gas lease applications in the WSA.

E. Impacts on Resources

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or non-designation of the entire area as wilderness (for a full explanation of this summary, refer to the Cedar Roughs and Rocky Creek - Cache Creek Wilderness Final Environmental Impact Statement).

Table 4 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION RNA/ACEC Designation Remain)	ALL-WILDERNESS ALTERNATIVE
Wilderness Values	Loss of naturalness and solitude on less than one percent of the WSA from the water and access development. The opportunity for primitive recreation would be enhanced by the new foot trail. Losses to the Sargent cypress stand would amount to less than one acre and the black bear population would be unchanged.	Naturalness and solitude would be enhanced on about two percent of the WSA by the closure and reversion to natural vegetation of four miles of jeep trails. Otherwise impacts would be essentially the same as under the Proposed Action.
Sargent Cypress	Loss of less than one acre of the 2,800-acre Sargent cypress stand.	Slightly less direct loss of the stand than under the Proposed Action (because no research-related access would be constructed) and more secure long-term protection.
Black Bears	Offsetting small negative impacts from improved hunter access and small positive impacts from water developments would result in no change in the bear population.	Small positive impacts from water development and reduced hunting pressure coupled with increased long-term security from wilderness designation could result in a 5% to 10% increase in the bear population.
Recreational Use	50% increase (to 300 visits per year) in recreational use (hiking and hunting) from the improved foot trail access.	The creation of foot trail access for the general public would be offset by the loss of vehicle access by local landowners, the result being no change in overall recreational use levels.

F. Local Social and Economic Consideretions

No local, social or economic considerations were identified in the Final Environmental Impact Statement. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain comments received during the inventory process and early stages of the EIS preparation were used to develop significant study issues and various alternatives for the ultimate management of these lands.

Sixteen people at the hearing testified with regard to the Cedar Roughs WSA. Of these, one supported the BLM's proposal for non-wilderness, and fifteen supported wilderness designation.

The Napa County Board of Supervisors supported the all-wilderness alternative, citing the lack of natural undeveloped public land in Napa County.

The State of California Resources Agency expressed support for all wilderness in the DEIS, but expressed support for no wilderness in the FEIS.

Other local, State and Federal agencies expressed no preference in their comments.

Dead Mountains Northern Addition

AZ-050-001

DEAD MOUNTAINS NORTHERN ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-001)

1. THE STUDY AREA --- 2,029 acres

The Dead Mountains Northern Addition WSA is located in San Bernardino County, roughly ten miles north of Needles, California. The WSA is composed entirely of public land administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1).

The WSA is contiguous to and bounded on the north and west by the Dead Mountains WSA (CDCA-276). The south boundary is formed by private lands. To the east, the boundary follows a transmission line and maintenance road, except for where it shifts west to avoid private land. The Dead Mountains Northern Addition WSA is contiguous with the Dead Mountains WSA except for anadministrative boundary between the Desert Conservation Area and the Yuma, Arizona District Office.

The WSA lies on a bajada sloping eastward from the Dead Mountains, with gently rolling hills and deeply cut washes. Vegetative cover is sparse, primarily creosote, bursage and cholla. Vegetation normally associated with desert washes is entirely lacking.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two different suitability recommendations were analyzed in the Yuma District Wilderness Environmental Impact Statement (EIS): no wilderness and all wilderness.

2. RECOMMENDATION AND RATIONALE ---

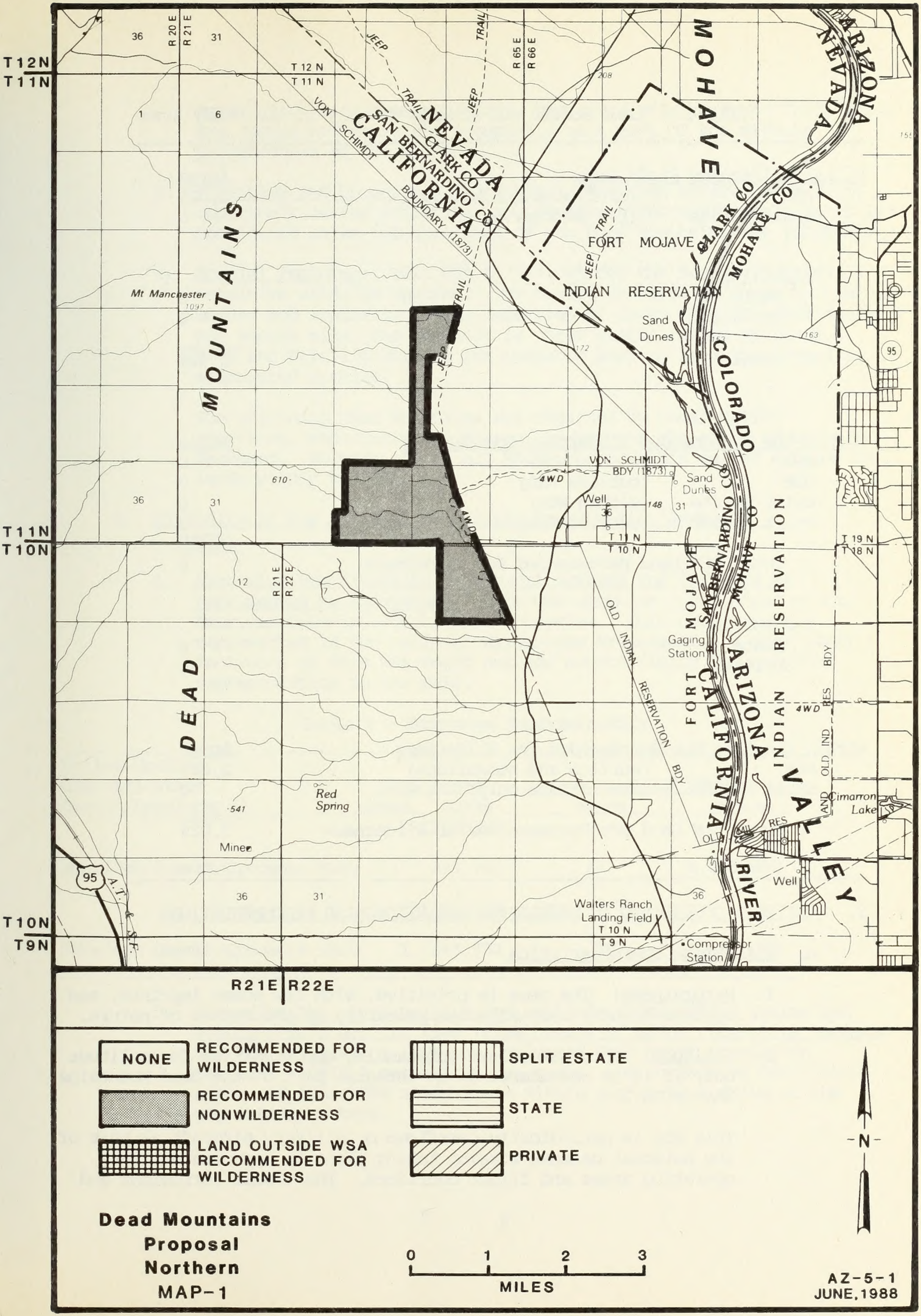
	0	acres recommended for wilderness
	2,029	BLM acres recommended for nonwilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts. The all-wilderness recommendation is environmentally preferable as it would result in the least change from the existing natural environment over the long term.

This WSA is not recommended for wilderness designation because: (1) the contiguous Dead Mountains WSA (CDCA-276) is not recommended for wilderness designation; (2) alone, this small parcel fails to meet the criteria outlined in Section 2(c) of the 1964 Wilderness Act; and (3) designation would preclude further development of an adjacent utility corridor.

The Dead Mountains Northern Addition WSA does not provide outstanding opportunities for solitude or for primitive types of recreation as an independent unit. Only when included with the larger Dead Mountains WSA (CDCA-276), do the WSA's wilderness values sufficiently satisfy the criteria set forth in Section 2(c) of the 1964 Wilderness Act.

A designated BLM utility corridor follows the powerline along the area's eastern boundary for approximately two miles. This corridor, which extends one-half mile into the WSA, has not reached development capacity although many of the other 16 corridors identified in the California Desert Conservation Area Plan are nearing build-out. Wilderness designation would prohibit full development of this corridor, forcing installation of new energy transmission lines in other corridors or in areas not previously disturbed. Depending upon which WSAs are ultimately designated wilderness within the CDCA, there may be constraints placed upon the long-term energy and communication transmission capabilities in the southwestern United States.



Dead Mountains Proposal Northern
MAP-1

AZ-5-1
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	2,029
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		2,029

Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0

Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	2,029
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		2,029

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The area is primitive, with few human imprints, and appears to have been affected primarily by the forces of nature.

2. Solitude: This WSA offers outstanding opportunities for solitude only if it is considered as an integral part of the Dead Mountains WSA (CDCA-276).

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The area offers outstanding opportunities for primitive and unconfined recreation only if it is considered as an integral part of the Dead Mountains WSA (CDCA-276).

4. Special Features: This WSA is habitat for the desert tortoise, a sensitive wildlife species. The desert tortoise is known to live in washes and foothills in low densities of fewer than 20 individuals per square mile. The tortoise is under status review by the U.S. Fish and Wildlife Service for possible listing as a threatened or endangered species.

   The adjoining Dead Mountains are regarded by local Native Americans, especially the Mohave, as home of the souls of their deceased. However, it is not known whether this belief extends to lands within the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 2,029 acres of the American Desert/Creosote bush ecosystem. This ecosystem is represented in the National Wilderness Preservation System (NWPS); inclusion of this WSA would not add substantially to ecosystem representation in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PN	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
		NATIONWIDE		
American Desert/Creosote Bush	1	343,753	117	4,265,880
		CALIFORNIA		
American Desert/Creosote Bush	1	343,753	88	3,652,076

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of fourteen BLM WSAs recommended for wilderness designation. The closest designated wilderness area is in Joshua Tree National Monument, located roughly 75 miles southwest.

C. Manageability

The Dead Mountains Northern Addition WSA is manageable as wilderness. There are no issues which would significantly constrain management of this area as wilderness. The entire WSA is made up of consolidated Federal surface and mineral estate. No inholdings exist. Also, no mining claims exist within this unit.

No roads or vehicle ways are known to enter the area. The unit's eastern boundary is easily identifiable and would require only minimal signing for on-the-ground identification. However, washes which cut across the area's narrow axis may require additional signing or other measures to ensure that intrusions by vehicles are eliminated. The remaining boundaries are not readily accessible by motorized vehicles.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Dead Mountains Northern Addition WSA is in the BLM Homer Mountain Geology-Energy-Minerals (G-E-M)

Resource Area (GRA). The Draft Yuma District EIS (1987) for Arizona did not address the mineral potential of the WSA during the recommendation process.

The Homer Mountain GRA file indicated that there were no known unpatented mining claims within the WSA as of December 12, 1979. The draft GRA report stated that high quality montmorillonitic clay on the east side of Dead Mountain had been prospected. The file indicated that the WSA was within an area assessed as having high potential for the occurrence of locatable nonmetallic minerals. However, the file did not specify where individual occurrences such as prospects or extraction sites were located within the WSA. Publications by the California Division of Mines (1953, Mines and Mineral Deposits in San Bernardino County, Journal of Mines, V. 49, Nos. 1 and 2, p. 136-139; and 1957, Mineral Commodities in California, Bull. 176, p. 131-152) did not show any clay localities in this area.

The GRA file indicated that the WSA had low potential for locatable metallic minerals due to unfavorable rock types (Quaternary-age sediments). The GRA file indicated that an area in the southern part of the WSA, slightly larger than one-half square mile, was prospectively valuable for oil and gas based on the 1978 U.S. Geological Survey (USGS) classification. Since the WSA is postulated to be within the Overthrust Belt, this area was classified as having a moderate potential for the occurrence of oil and gas. The GRA file indicates that the WSA had low potential for the occurrence of common salable minerals such as sand and gravel.

2. Summary of Significant New Mineral Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: No USGS or U.S. Bureau of Mines mineral surveys were conducted for the WSA because it was recommended nonsuitable.

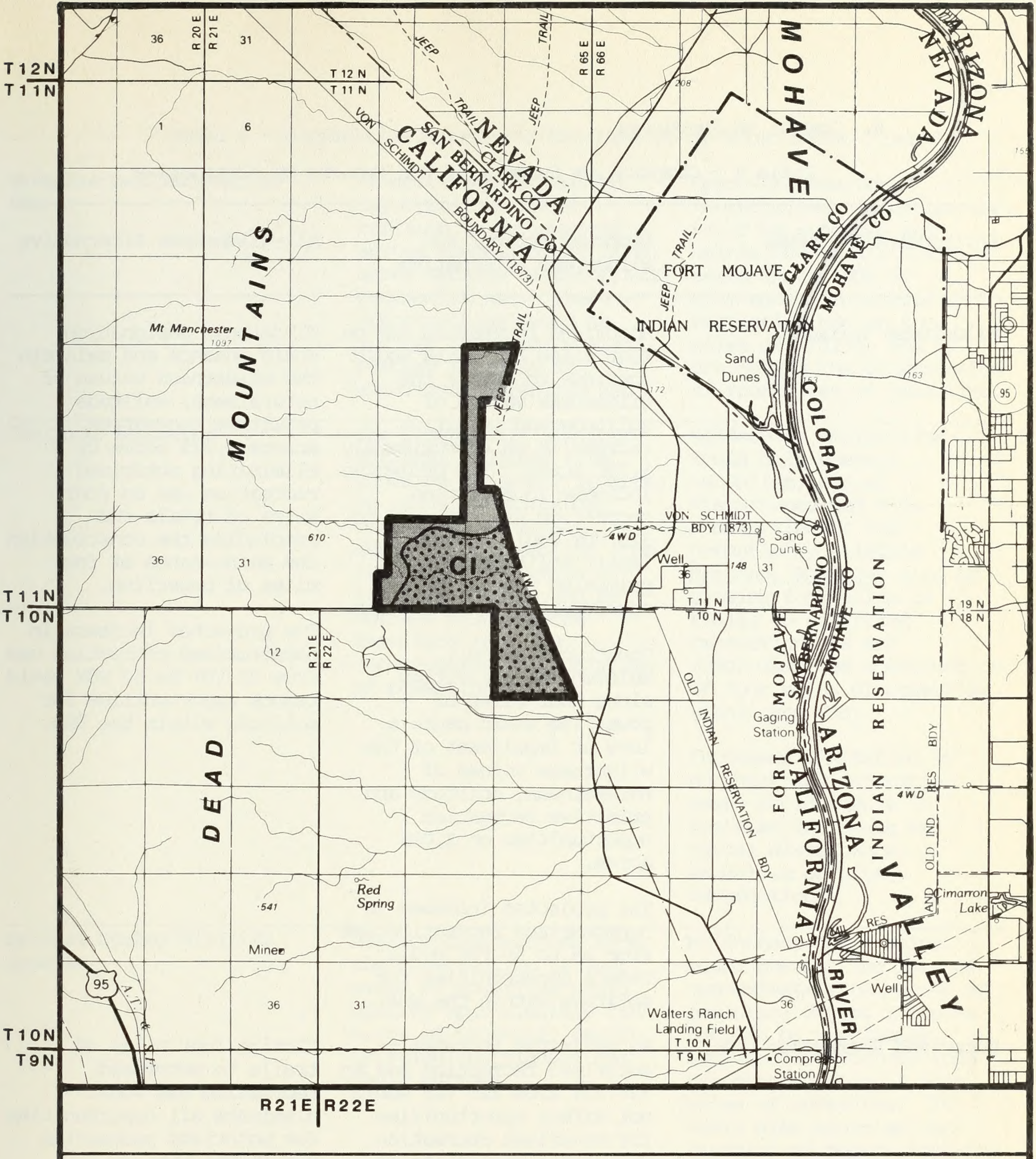
In 1985, the California Division of Mines and Geology (CDMG) completed mineral surveys of the Needles 1x2 degree quadrangle, San Bernardino County, California and published the results in Open File Report (OFR) 85-18 SAC, and in 1984 published the results of their surveys for the Lanfair Valley, Homer Mountain, and Davis Dam 15 minute quadrangles in OFR 84-30 SAC. The CDMG mineral land classifications covered the entire area of the Dead Mountains and more clearly defines the mineral occurrence potential for the Dead Mountains Northern Addition WSA. However, there were no production figures in either study.

OFR 84-30 SAC (Plate 4) classified the area containing the northern part of the WSA as an area where geologic information does not rule out either the presence or absence of metallic or industrial mineral resources. This assessment is equivalent to the BLM classification of "not determined or unknown." The CDMG classified an area containing most of the southern part of the WSA as having hypothetical resources of clay. This assessment is equivalent to the BLM classification of moderate potential for occurrence as shown on the accompanying mineral resource potential Map 2. The moderate potential area represents those portions of the Chemehuevi Lake beds which contain montmorillonite clay. The beds in the lake range in thickness from a few inches up to 20 feet. The CDMG report revealed that Southern Pacific Company (1964) conducted a study on the Chemehuevi Lake clays to determine their economic suitability. They concluded that the clays have possible economic value as pond sealant and as an ingredient for Portland cement to provide a nonplastic additive to reduce drying and firing shrinkage. According to the CDMG report (p. 43), there is no history of mining in the WSA.

No exploration interest has been expressed for oil and gas in this WSA after about 1981. Therefore, the areas considered in the 1980 BLM GRA report as having a moderate potential rating for the occurrence of oil and gas, have been lowered to a low potential.

The southern one-third of the WSA is currently segregated from mineral location and entry under the mining laws by a withdrawal for the Colorado River Reclamation Project (Secretarial Order dated 10-21-31).

As of January, 1988, there were no unpatented mining claims, mineral sales or leases recorded with the BLM in the WSA.



NONE Recommended for Wilderness

▩ Recommended for Non Wilderness

▦ Land outside WSA Recommended for Wilderness

▥ Split Estate

▤ State

▨ Private

Explanation

▧ High Potenial for the Occurrence of Energy and/or Non-energy Minerals

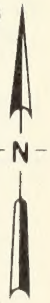
⠿ Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals

M Moderate Mineral Potential Location in a High Mineral Potential Area

H High Mineral Potential Location in a Moderate Mineral Potential Area

Commodity Symbols

Cl Clay



Dead Mountains
Northern
Mineral Resource Potential

MAP-2
AZ-5-1

E. Impact on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Wilderness Values	Motorized recreation use on four miles of trails would continue to impair the wilderness values of solitude and primitive recreation on approximately 1,750 acres. The projected increase in motorized recreation use from 225 to 325 VDY would further impair solitude and primitive recreation opportunities in this area. Construction and maintenance activities along four miles of powerline would cause a loss or impairment of the wilderness values of naturalness, solitude and primitive recreation opportunities on 2,029 acres. The projected increase in nonmotorized recreation use from 25 to 50 VDY would reduce opportunities for solitude within the WSA.	Wilderness designation would enhance and maintain the wilderness values of naturalness, solitude primitive recreation across 2,029 acres by eliminating motorized recreation use on four miles of trials and precluding the construction and maintenance of four miles of powerline. The projected increase in nonmotorized recreation use from 25 VDY to 50 VDY would reduce opportunities for solitude within the WSA.
Motorized Recreation Use	An estimated increase in motorized recreation use to 325 VDY from 225 VDY would not affect opportunities for motorized recreation use on the four miles of trails in the WSA, except for some impairment during heavy use periods.	Closing four miles of trails to motorized recreation use would eliminate all opportunities for motorized recreation use in the WSA.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Nonmotorized Recreation Use	Nonmotorized recreation opportunities would continue to be impaired across approximately 1,750 acres because of motorized recreation use. These opportunities would be further impaired by a 44 percent increase in motorized recreation use.	Opportunities for nonmotorized recreation use would be enhanced and maintained on all 2,029 acres in the WSA by eliminating motorized recreation use on four miles of trails, and by precluding the construction of four miles of powerline.
Cultural Resources	One potentially eligible National Register site could be adversely impacted by casual disturbance, vandalism and site destruction resulting from increased visitation by recreation users and by surface disturbances resulting from the construction of four miles of powerline.	Wilderness designation would help prevent vandalism, casual disturbance and site destruction at one potentially eligible National Register site by closing four miles of trails to motorized recreation use and precluding the construction of four miles of powerline within the WSA. Increased visitation by nonmotorized recreation users could result in isolated incidents of casual disturbance, vandalism or site destruction.
Special Status Wildlife Species	Surface disturbances from the construction of four miles of powerline would destroy approximately ten acres of potential desert tortoise individuals and their burrows.	Wilderness designation would prevent the loss of approximately ten acres of potential desert tortoise habitat by precluding surface disturbances form the construction of four miles of powerline. It would also minimize the crushing of desert tortoise individuals and burrows by motor vehicles by closing four miles of trails to motorized recreation use.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Utility Corridors	Construction of a projected powerline in the section of designated corridor that traverses the WSA would proceed as planned.	Closing a four-mile section of designated utility corridor within the WSA could adversely impact the construction of a projected powerline by forcing rerouting of the powerline across the adjacent Fort Mohave Indian Reservation.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District FEIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: No public comments addressing the wilderness characteristics of the unit were received during the Initial Inventory. Following the inventory, a lapidary society wrote opposing further inventory or study of this unit because of BLM's failure to portray on maps all roads and its lack of attention to mineral resources, including operating mines, mineral locations, and mining claims.

   The Intensive Inventory elicited three letters. All were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area as one of the best examples of wild lands in the west.

2. Study Phase: The Draft Yuma Resource Management Plan (RMP) and EIS recommended that the WSA and several other WSAs in the Yuma District be recommended unsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness than was recommended by BLM. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs within the planning area be designated suitable. One writer noted that the rigorous

screening process had eliminated all but the most outstanding WSAs. Two people who commented suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

Only four comments were specific to this WSA. The Yuma Audubon Society requested that this small area be designated wilderness if the adjacent Dead Mountains WSA in the California Desert Conservation Area becomes wilderness. They observed that there are few conflicting uses within the unit: no man-made developments; no grazing; low recreational use, and little chance for more in the future due to the distance to population centers; low mineral, oil, gas, and geothermal potential; and no mining claims. The desert tortoise is found in this area, and, as stated by the California Department of Fish and Game, the bighorn sheep also is found here (not known to occur in this portion of the Dead Mountains). One individual requested that this WSA be recommended as suitable for wilderness.

A regional mining council noted that this unit has significant gold potential.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be recommended unsuitable for wilderness. Many respondents supported the general "no wilderness" position for the area and a number of other WSAs within the Yuma District. Their major concerns were the need for motorized vehicle access for mineral exploration, recreation, and maintenance of water facilities for wildlife. An equally large number of respondents, including the Sierra Club, favored wilderness designation for all of the WSAs within the District.

   Four comments specifically mentioned this WSA. Respondents opposing a suitable recommendation were mostly concerned about access for mining. The Arizona Mining Association and a representative of the precious metals industry wanted this area to be left open. The California Department of Fish and Game stated that it has a 14-year plan to relocate and reintroduce desert bighorn sheep back into suitable historic ranges in the Dead Mountains, and that BLM should recognize that this program should not be hindered by restrictions on vehicle access.

The Yuma Chapter of the Audubon Society stated if Congress declares the adjoining Dead Mountains WSA in California as wilderness, this addition should also become wilderness.

No comments were received from local governments.

Dead Mountains Southern Addition

AZ-050-002

DEAD MOUNTAINS SOUTHERN ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-002)

1. THE STUDY AREA --- 903 acres

The Dead Mountains Southern Addition WSA is located in San Bernardino County, roughly five miles north of Needles, California. The WSA is composed of 903 acres of Bureau of Reclamation withdrawn public land, administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1).

This WSA is contiguous to and bounded by the Dead Mountains WSA (CDCA-276) on the west and south. To the north, the area is bounded by private land, and to the east, a powerline maintenance road and a gas pipeline maintenance road form the boundary. The Dead Mountains Southern Addition WSA is contiguous with the Dead Mountains WSA, except for an administrative boundary between the California Desert Conservation Area and Yuma, Arizona District.

The area is part of a bajada, sloping eastward from the Dead Mountains. It has been dissected by small washes which has exposed older alluvial deposits. Vegetative cover is sparse; primarily creosote, bursage and cholla. Vegetation commonly associated with desert washes is conspicuously lacking.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two different suitability recommendations were analyzed in the Yuma District Wilderness Environmental Impact Statement (EIS): no wilderness and all wilderness.

2. RECOMMENDATION AND RATIONALE --- 0 acres recommended for wilderness
903 BLM acres recommended for nonwilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

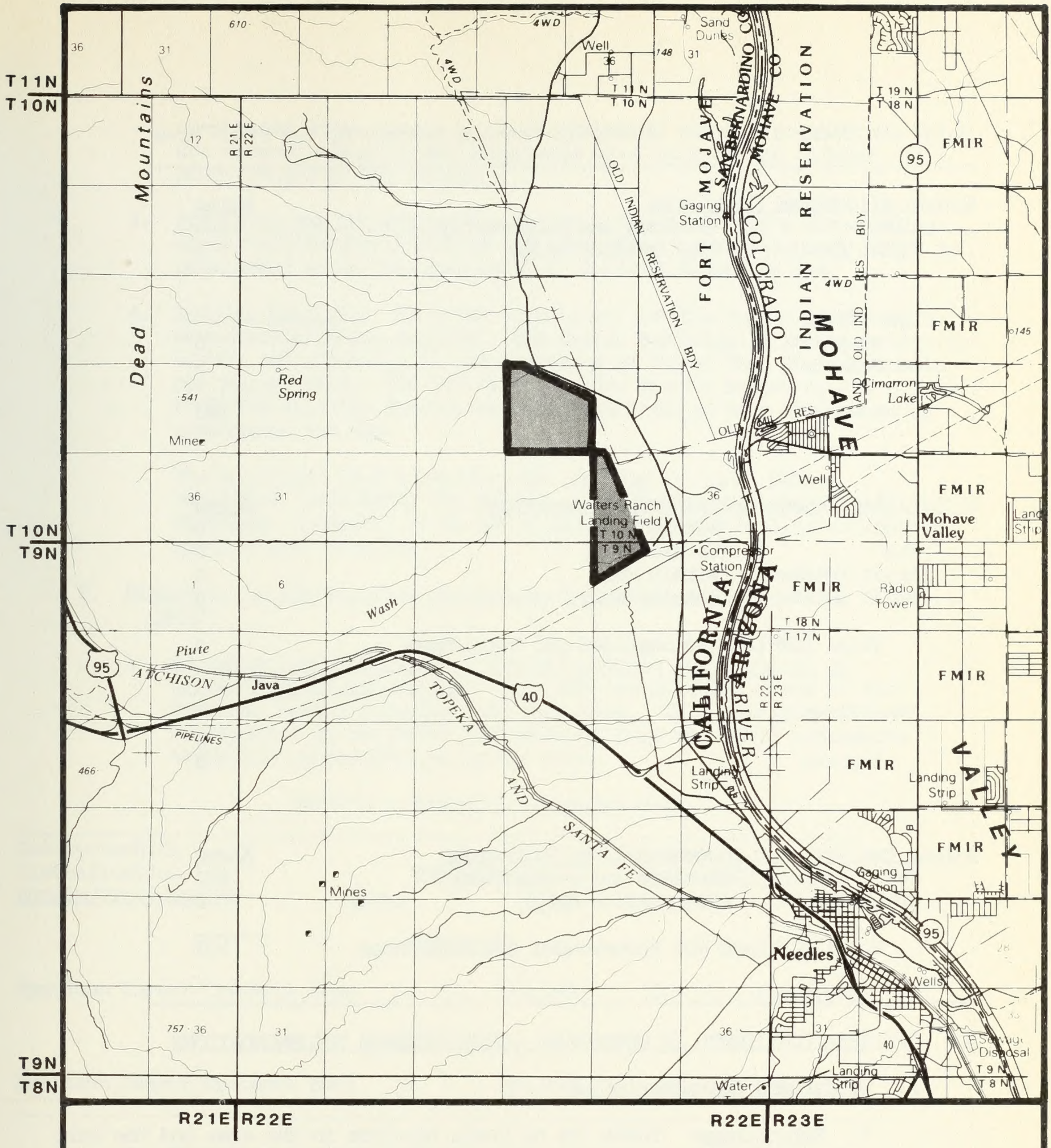
The all-wilderness recommendation is environmentally preferable as it would result in the least change from the existing natural environment over the long term.

This WSA is not recommended for wilderness designation because: (1) the contiguous Dead Mountains WSA is not recommended for wilderness designation, and alone, this small parcel fails to meet the criteria outlined in Section 2(c) of the 1964 Wilderness Act; and (2) designation would preclude further development of an adjacent utility corridor.

The Dead Mountains Southern Addition WSA does not provide outstanding opportunities for solitude or for primitive types of recreation as an independent unit. Only when included with the larger Dead Mountains WSA do the WSA's wilderness values sufficiently satisfy the criteria set forth in

Section 2(c) of the 1964 Wilderness Act. On its own, the WSA fails to meet these criteria. No primitive routes of travel have been identified within the WSA.

A designated BLM utility corridor follows the powerline along the area's eastern boundary for approximately two miles. This corridor, which covers most of the WSA, has not reached development capacity although many of the other 16 corridors identified in the California Desert Conservation Area Plan are nearing build-out. Wilderness designation would prohibit full development of this corridor, forcing installation of new energy transmission lines in other corridors or in areas not previously disturbed. Depending upon which WSAs are ultimately designated wilderness within the CDCA, there may be constraints placed upon the long-term energy and communication transmission capabilities in the southwestern United States.



NONE — RECOMMENDED FOR WILDERNESS

░ — RECOMMENDED FOR NONWILDERNESS

▦ — LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS

▥ — SPLIT ESTATE

▤ — STATE

▨ — PRIVATE

Dead Mountains
Southern Addition
Proposal
MAP-1

0 1 2 3
MILES

N

AZ-5-2
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	903
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		903

Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0

Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	903
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		903

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: There are no human imprints in the area and the unit appears to have been affected primarily by the forces of nature.

2. Solitude: This WSA offers outstanding opportunities for solitude only if it is considered as an integral part of the Dead Mountains WSA.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The area offers outstanding opportunities for primitive and unconfined recreation only if it is considered as an integral part of the Dead Mountains WSA.

4. Special Features: This WSA is habitat for the desert tortoise, a sensitive wildlife species. The desert tortoise is known to live in washes and foothills in low densities of fewer than 20 individuals per square mile. The tortoise is under status review by the U.S. Fish and Wildlife Service for possible listing as a threatened or endangered species.

   The adjoining Dead Mountains are regarded by local Native Americans, especially the Mohave, as home of the souls of their deceased. However, it is not known whether this belief extends to lands within this WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 903 acres of the American Desert/Creosote Bush ecosystem. This ecosystem is represented in the NWPS; inclusion of this WSA would not add to ecosystem representation in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
		NATIONWIDE		
American Desert/Creosote Bush	1	343,753	117	4,267,006
		CALIFORNIA		
American Desert/Creosote Bush	1	343,753	88	3,653,202

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of four major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of fourteen BLM WSAs recommended for wilderness designation. The closest designated wilderness area is in Joshua Tree National Monument, located roughly 75 miles southwest.

C. Manageability

The Dead Mountains Southern Addition WSA is manageable as wilderness. There are no issues which would significantly constrain management of this area as wilderness. The entire WSA is made up of consolidated Federal surface and mineral estate. No inholdings exist. Also, no mining claims exist within this unit.

No roads or vehicle ways are known to enter the area. The unit's eastern boundary is easily identifiable and would require only minimal signing for on-the-ground identification. The remaining boundaries are not readily accessible by motorized vehicles.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Dead Mountains Southern Addition WSA is located in the BLM Homer Mountain Geology-Energy-Minerals (G-E-M) Resource Area (GRA). The Draft Yuma District EIS (1987) for Arizona did not address the mineral potential of the WSA.

The Homer Mountain GRA file indicated that there were no known mining claims within the WSA as of December 12, 1979. The draft GRA report stated that high quality montmorillonitic clay on the east side of Dead Mountain had been prospected. The file showed that the WSA lies within an area assessed as having high potential for the occurrence of locatable nonmetallic minerals. However, the file did not specify where individual occurrences such as prospects or extraction sites were located within the WSA. Publications by the California Division of Mines (1953, Mines and Mineral Deposits in San Bernardino County, Journal of Mines, V. 49, Nos. 1 and 2, p. 136-139; and 1957, Mineral Commodities in California, Bull. 176, p. 131-152) did not show any clay localities in this area.

The GRA file indicated that the WSA had low potential for locatable metallic minerals due to unfavorable rock types--Quaternary-age sediments. The GRA file indicated that the WSA was prospectively valuable for oil and gas based on the 1978 U.S. Geological Survey (USGS) classification. Since the WSA is postulated to be within the Overthrust Belt, this area was classified as having a moderate potential for the occurrence of oil and gas. The GRA file indicated that the WSA had low potential for the occurrence of saleable mineral materials such as sand and gravel.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: In 1985, the California Division of Mines and Geology (CDMG) completed mineral surveys of the Needles 1x2 degree quadrangle, San Bernardino County, California and published the results in Open File Report (OFR) 85-18 SAC. The CDMG mineral land classifications covered the entire area of the Dead Mountains and more clearly defined the mineral occurrence potential for the Dead Mountains Southern Addition WSA. However, no production figures were given.

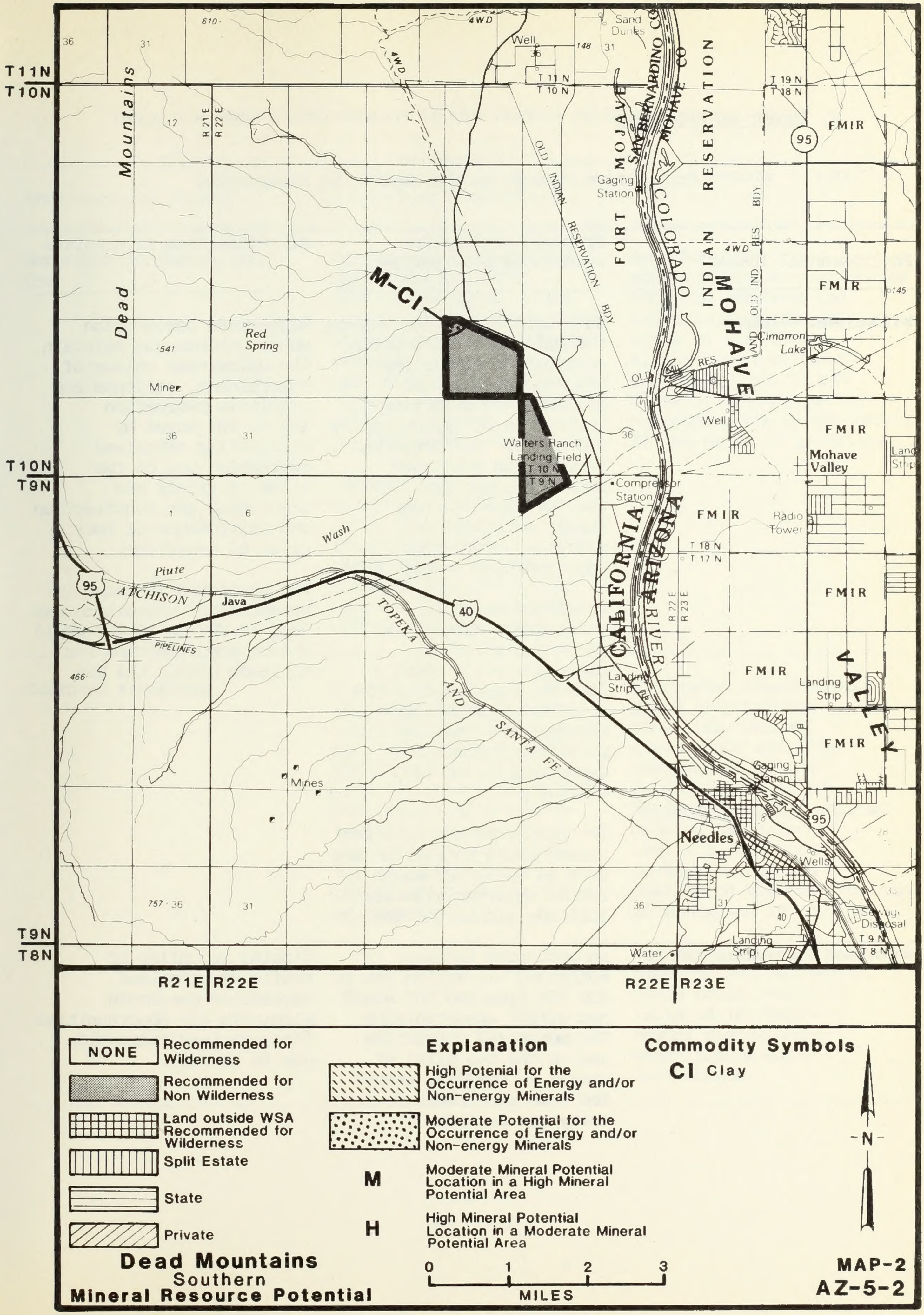
   The CDMG classified an area containing about 12 acres in the northwestern part of the WSA as having hypothetical resources of clay. This assessment is equivalent to the BLM classification of moderate potential for occurrence as shown on Map 2. The moderate potential area represents those portions of the Chemehuevi Lake beds which contain montmorillonite clay. The beds in the lake range in thickness from a few inches up to 20 feet.

   The CDMG report revealed that the Southern Pacific Company (1964) conducted a study on the Chemehuevi Lake clays which concluded that the clays had possible economic value for pond sealant and as a nonplastic additive to reduce drying and firing shrinkage in portland cement. According to the CDMG report (p. 43), there is no history of mining in the WSA.

No exploration interest has been expressed for oil and gas in this WSA after about 1981. Therefore, the areas considered in the 1980 BLM GRA report as having a moderate potential rating for the occurrence of oil and gas, have been lowered to a low potential under the BLM classification system.

The area is currently segregated from mineral location and entry under the mining laws by a withdrawal for the Colorado River Reclamation Project (Secretarial Order dated 10-21-31).

As of January, 1988, there were no unpatented mining claims, mineral sales or leases recorded with the BLM in the WSA.


T11N
T10N
T10N
T9N
T9N
T8N
R21E R22E
R22E R23E
Dead Mountains
Red Spring
Miner
M-CI
Walters Ranch Landing Field
OLD INDIAN RESERVATION BDY
FORT MOJAVE INDIAN RESERVATION
SAN BERNARDINO CO
MOHAVE CO
COLORADO RIVER
CALIFORNIA
ARIZONA
MOHAVE VALLEY
Mohave Valley
Gaging Station
Compressor Station
Sand Dunes
Well
4WD
FMIR
Cimarron Lake
Radio Tower
Landing Strip
Piute Wash
ATCHISON TOPEKA AND SANTA FE
PIPELINES
Java
Mines
Needles
Wells
Sewage Disposal
Water
95
40
NONE Recommended for Wilderness
Recommended for Non Wilderness
Land outside WSA Recommended for Wilderness
Split Estate
State
Private
Explanation
High Potenial for the Occurrence of Energy and/or Non-energy Minerals
Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals
M Moderate Mineral Potential Location in a High Mineral Potential Area
H High Mineral Potential Location in a Moderate Mineral Potential Area
Commodity Symbols
Cl Clay
N
0 1 2 3
MILES

Dead Mountains
Southern
Mineral Resource Potential

MAP-2
AZ-5-2

E. Impact on Resources

Table 4
Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Wilderness Values	Motorized recreation use on two miles of trails would continue to impair the wilderness values of solitude and primitive recreation on approximately 903 acres. The projected increase in motorized recreation use from 160 to 250 VDY would further impair solitude and primitive recreation opportunities in this area. Construction and maintenance activities along two miles of powerline would cause a loss or impairment of the wilderness values of naturalness, solitude and primitive recreation opportunities on 903 acres. The projected increase in nonmotorized recreation use from 40 to 50 VDY would reduce opportunities for solitude within the WSA.	Wilderness designation would enhance and maintain the wilderness values of naturalness, solitude and primitive recreation across 903 acres by eliminating motorized recreation use on two miles of trials and precluding the construction and maintenance of four miles of powerline. The projected increase in nonmotorized recreation use from 40 VDY to 50 VDY would reduce opportunities for solitude within the WSA.
Motorized Recreation Use	An estimated increase in motorized recreation use to 250 VDY from 160 VDY would not affect opportunities for motorized recreation use on the two miles of trails in the WSA, except for some impairment during heavy use periods.	Closing two miles of trails to motorized recreation use would eliminate all opportunities for motorized recreation use in the WSA.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Nonmotorized Recreation Use	Nonmotorized recreation opportunities would continue to be impaired across approximately 903 acres because of motorized recreation use. These opportunities would be further impaired by a 36 percent increase in motorized recreation use. Construction and maintenance activities along two miles of powerline would occasionally impair nonmotorized recreaiton opportunitites over the entire 637-acre area.	Opportunities for nonmotorized recreation use would be enhanced and maintained on all 903 acres in the WSA by eliminating motorized recreation use on two miles of trails, and by precluding the construction of two miles of powerline.
Cultural Resources	One potentially eligible National Register site could be adversely impacted by casual disturbance, vandalism and site destruction resulting from increased visitation by recreation users and by surface disturbances resulting from the construction of two miles of powerline.	Wilderness designation would help prevent vandalism, casual disturbance and site destruction at one potentially eligible National Register site by closing two miles of trails to motorized recreation use and precluding the construction of two miles of powerline. Increased visitation by nonmotorized recreation users could result in isolated incidents of casual disturbance, vandalism or site destruction.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Special Status Wildlife Species	Surface disturbances from the construction of two miles of powerline would destroy approximately five acres of potential desert tortoise habitat. Motorized recreation use on two miles of trails would continue to occasionally crush desert tortoise individuals and their burrows.	Wilderness designation would prevent the loss of approximately five acres of potential desert tortoise habitat by precluding surface disturbances form the construction of two miles of powerline. It would also minimize the crushing of desert tortoise individuals and burrows by motor vehicles by closing four miles of trails to motorized recreation use.
Utility Corridors	Construction of a projected powerline in the section of designated corridor that traverses the WSA would proceed as planned.	Closing a two-mile section of designated utility corridor within the WSA could adversely impact the construction of a projected powerline by forcing rerouting of the powerline across the adjacent Fort Mohave Indian Reservation.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the CDCA Plan and EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: No public comments addressing the wilderness characteristics of the unit were received during the Initial Inventory. Following the inventory, a lapidary society wrote opposing further inventory or study of this unit because of the failure of BLM maps to portray all roads, mines, mineral locations, and mining claims.

The Intensive Inventory elicited three letters. All were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area as one of the best examples of wild lands in the west.

2. Study Phase: Draft Yuma Resource Management Plan (RMP) and EIS. The Draft RMP recommended that this WSA and several other WSAs in the Yuma District be recommended unsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness than was recommended by BLM. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs within the planning area be designated suitable. One writer noted that the rigorous screening process had eliminated all but the most outstanding WSAs. Two of those who commented suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

   Only three comments were specific to this WSA. The Yuma Audubon Society requested that this small area be designated wilderness if the adjacent Dead Mountains WSA in the California Deseurt Conservation Area becomes wilderness. They observed that there are few conflicting uses within the unit: no man-made developments; no grazing; low recreational use, and little chance for more in the future due to the distance to population centers; low mineral, oil, gas, and geothermal potential; and no mining claims. The desert tortoise is found in this area, and, as stated by the California Department of Fish and Game, the bighorn sheep also is found here (not known to occur in this portion of the Dead Mountains).

   A regional mining council noted that this unit has significant gold potential. One individual respondent requested a recommendation of suitable for this particular WSA.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be recommended unsuitable for wilderness. Many respondents supported the general "no-wilderness" position for the WSA and a number of other WSAs within the Yuma District. Their major concerns were the need for motorized vehicle access for mineral exploration, recreation, and maintenance of water facilities for wildlife. An equally large number of comments, including those from the Sierra Club, favored wilderness designation for all of the WSAs within the District.

   Five comments specifically mentioned this WSA. Respondents opposing a suitable recommendation were mostly concerned about access for mining. The Arizona Mining Association, a representative of the precious metals industry, and an individual miner wanted this area to be left open. The California Department of Fish and Game stated that it has a 14-year plan to relocate and reintroduce desert bighorn sheep back into suitable historic ranges in the Dead Mountains, and that BLM should recognize that this program should not be hindered by restrictions on vehicle access.

The Yuma Chapter of the Audubon Society stated if Congress declares the adjoining Dead Mountains WSA in California as wilderness, this small addition should also become wilderness.

No comments were received from local government.

Chemehuevi Mountains Addition

AZ-050-003

CHEMEHUEVI MOUNTAINS ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-003)

1. THE STUDY AREA --- 193 acres

The Chemehuevi Mountains Addition WSA is near the Colorado River in eastern San Bernardino County, California, about 11 miles southeast of Needles. The study area consists entirely of public land administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1). This WSA is within Arizona BLM's Yuma District, but is contiguous with California Desert District's Chemehuevi Mountains WSA (CDCA 310). The Chemehuevi Mountains Addition WSA is bounded by CDCA 310 on the west and south, and by the Havasu National Wildlife Refuge on the east. The north boundary is a pipeline maintenance road.

The WSA has rugged terrain, with a 200-foot difference in elevation in less than one-half mile. The area consists of the break between alluvial plain and mountain base. Vegetation is sparse, and consists mainly of creosote bush and bursage.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EISs) for the Proposed Wilderness Program for the Yuma District: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE --- 0 acres recommended for wilderness
193 BLM acres recommended for nonwilderness

No wilderness is the recommendation for the Chemehuevi Mountains Addition WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

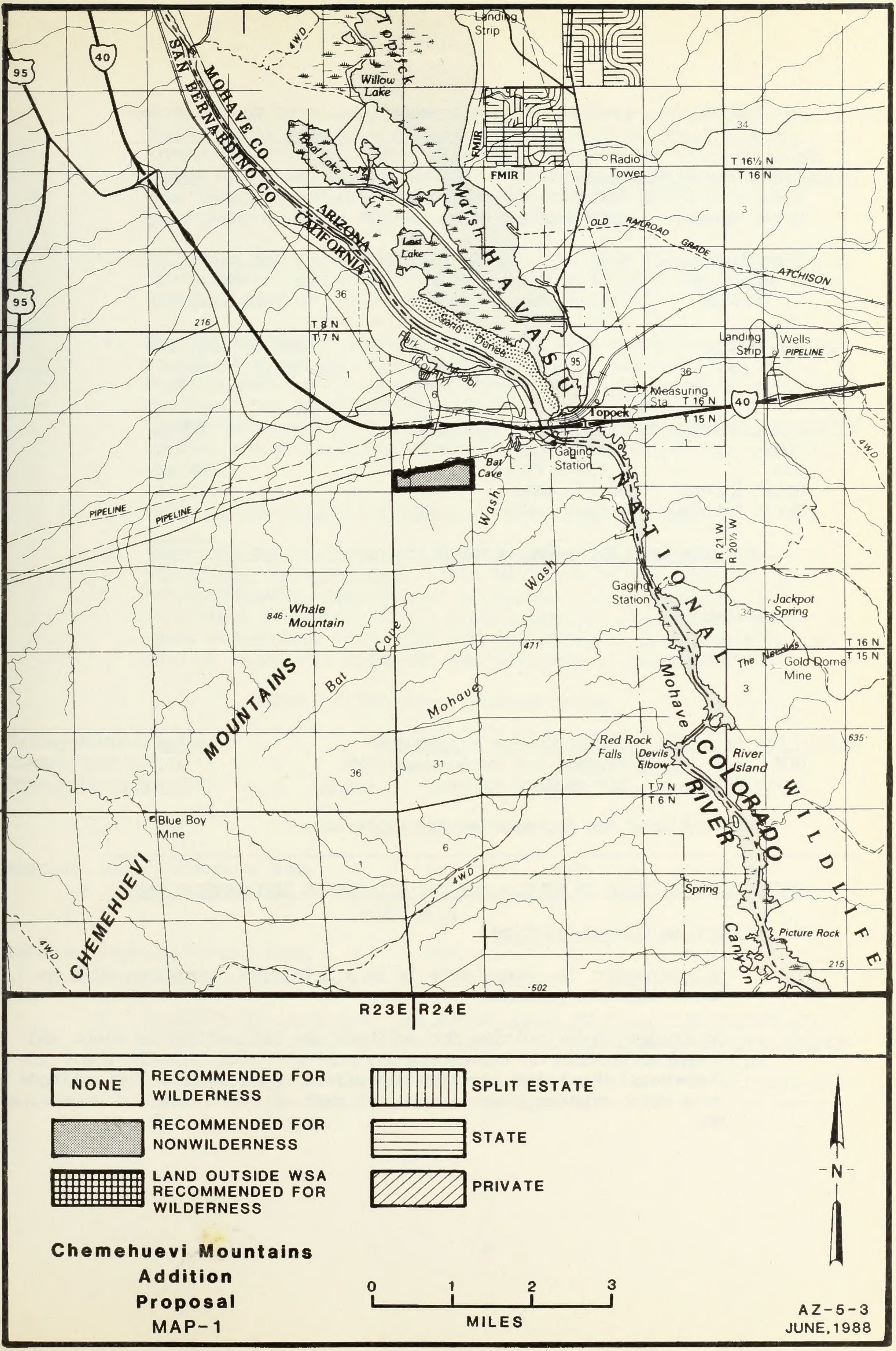
All wilderness is the environmentally-preferable alternative because it would result in the least change to the existing natural environment over the long-term.

The no-wilderness recommendation is based on the following rationale: (1) the Bureau of Reclamation has proposed a quarry within the WSA, (2) the WSA is entirely within a two-mile wide utility corridor in which future developments are proposed, and (3) the area's value for these two resource uses exceed its value as wilderness.

The entire WSA is withdrawn by the Bureau of Reclamation, which has identified the area as a rip-rap quarry site. Approximately 85 acres on the east side of the study area would be disturbed for the quarry and the haul road for removing the rock. This use could not occur if the area is designated wilderness.

A two-mile wide designated BLM utility corridor covers the entire WSA. Presently, the corridor contains a gas pipeline and the maintenance road, which forms the WSA's north boundary. A second gas pipeline is proposed for construction within the WSA south of the existing pipeline. This pipelikne oculd not be constructed if the area is designated wilderness. No primitive routes of travel have been identified within the WSA.

The WSA's value as a quarry and as part of a utility corridor are enhanced by its easy accessibility. A segment of Interstate 40 containing an interchange is approximately one-half mile north of the study area. The WSA's location makes it more valuable for uses other than wilderness.



Chemehuevi Mountains
Addition
Proposal
MAP-1

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	193
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		193

Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0

Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	193
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		193

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The study area is in a primitive condition, with no human imprints present.

2. Solitude: Opportunities for solitude are reduced by the sight and sound of traffic on Interstate 40, one-half mile from the WSA. The Chemehuevi Mountains Addition WSA offers opportunities for solitude only when considered as an integral part of the Chemehuevi Mountains WSA.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The area offers opportunities for primitive and unconfined recreation only when considered as an integral part of the Chemehuevi Mountains WSA.

4. Special Features: The WSA includes habitat for the desert tortoise (Gopherus agassizi), under status review by the U.S. Fish and Wildlife Service for possible listing as a threatened or endangered species. The population density is low, estimated at 0-20 individuals per square mile. Desert bighorn sheep, a BLM sensitive species and a California state-listed rare species, also occur in the WSA.

B. Diversity in the National Wilderness Preservation System

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 193 acres of the American Desert/Creosote Bush ecosystem. This ecosystem is ubiquitous in the California desert, and is well represented in areas recommended for wilderness designation. Designation of the area as wilderness would not add diversity to the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
	NATIONWIDE			
American Desert/Creosote Bush	1	343,753	117	4,267,716
	CALIFORNIA			
American Desert/Creosote Bush	1	343,753	88	3,653,912

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of four major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The closest designated wilderness is in Joshua Tree National Monument, 60 air miles southwest. Nine BLM study areas recommended for wilderness designation are within 50 air miles of the Chemehuevi Mountains Addition WSA, five in Arizona's Phoenix District, one in Arizona's Yuma District, and three in the California Desert District.

C. Manageability

The Chemehuevi Mountains Addition WSA is manageable as wilderness. The west, south, and east boundaries are secure, since they adjoin other lands recommended for wilderness. The north boundary is easily recognizable by the public and coincides closely with a sharp break in slope that effectively restricts off-highway vehicle use.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Chemehuevi Mountains Addition WSA is located in the BLM Sacramento Mountains Geology-Energy-Minerals (G-E-M) Resource Area (GRA). The Draft Yuma District EIS (1987) for Arizona did not address the mineral potential of the WSA. The draft Sacramento Mountains GRA file was not available at the time this report was prepared. Mineral resource maps in the 1980 CDCA Plan do not indicate any areas of mineral potential within the WSA.

2. Summary of significant new mineral resource data collected since the preliminary suitability recommendation which should be considered in the final decision: No U.S. Geological Survey (USGS) or U.S. Bureau of Mines (BOM) mineral survey has been conducted for this WSA because it is recommended nonsuitable.

The southern boundary of the WSA is adjacent to Chemehuevi Mountains WSA which was assessed by a combined mineral survey summary report prepared in 1983 by USGS and BOM. The report, Mineral Resource Potential of the Chemehuevi Mountains Wilderness Study Area... accompanies Miscellaneous Field Map MF-1584-A. This report concluded that WSA CDCA 310 had low potential for the occurrence of mineral resources. Map MF-1584-A also shows that the WSA is comprised mostly of Mesozoic-age foliated granitic rocks. In the WSA, these rocks are mostly part of the upper plate of a thrust fault, bounded by a low-angle normal fault (detachment). The northern part of the WSA contains minor amounts of Quaternary-age alluvium. On the same map a BLM geologist has penciled in the location of a proposed Bureau of Reclamation rip-rap (saleable mineral) quarry half a mile south of the WSA. The site is in Mesozoic (?) age metamorphic rocks (layered gneiss and migmatite) representing lower plate rocks beneath the detachment fault.

Currently, the California Department of Transportation operates a sand and gravel pit (material site right-of-way; case number LA 157517) one-third mile north of the WSA for maintenance of Interstate 40. The WSA consists of rugged mountain slopes, with steep, narrow drainages which are not conducive to the formation of extensive sand and gravel deposits. Most of the sand and gravel deposits in the area are along Interstate 40, in the alluvial fans outside of the WSA.

The above data suggest that this WSA has low potential for the occurrence of mineral resources; consequently no mineral potential map accompanies this report.

The WSA is included in a withdrawal for the Colorado River Reclamation project, segregated from the operation of the mining laws by Secretarial Order in 1931. As of January, 1988, there were no unpatented mining claims, mineral sales or leases recorded with the BLM in the WSA.

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action (No Wilderness)	All-Wilderness Alternative
Wilderness Values	Construction and maintenance activities along one mile of pipeline and operations at an 85-acre quarry would cause a loss or impairment of the wilderness values of naturalness, solitude and primitive recreation on 193 acres.	Wilderness designation under the all-wilderness alternative would enhance and maintain the wilderness values of naturalness, solitude and primitive recreation across 193 acres by precluding the construction and maintenance of one mile of pipeline and the development of an 85-acre riprap quarry. The projected increase in nonmotorized recreation use from 10 to 20 VDY would reduce opportunities for solitude within the WSA.
Nonmotorized Recreation Use	Construction and maintenance activities along one mile of pipeline and operations at an 85-acre quarry would impair nonmotorized recreation opportunities over the entire 193-acre area.	Opportunities for nonmotorized recreation use would be maintained on all 193 acres in the WSA by precluding the construction of one mile of pipeline and the development of an 85-acre quarry.
Special Status Wildlife Species	Surface disturbances from the construction of one mile of pipeline and the development of an 85-acre quarry would destroy approximately 87.5 acres of potential desert tortoise habitat.	Wilderness designation would prevent the loss of approximately 87.5 acres of potential desert tortoise habitat by precluding surface disturbances from the construction of one mile of pipeline and the development of an 85-acre quarry.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Uses of Withdrawn Land	Development of a projected 85-acre riprap quarry would help to ensure a constant supply of riprap for U.S. Bureau of Reclamation (USBR) operations along the lower Colorado River.	Precluding the development of a projected USBR quarry site could disrupt the supply of riprap for USBR operations along the lower Colorado River.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

The following is a summary of all comments received.

1. Inventory Phase: During the Initial Inventory, the Bureau of Reclamation, Lower Colorado Region, noted that the Park Moabi South rock quarry is in or adjacent to the WSA boundary. Extensive pipeline and operating roads are located throughout the area, adjacent to U.S. Route 40. The Bat Cave Wash number one quarry is in operation, with good access roads. (Since the quarries are on Reclamation Withdrawn lands, they would have priority over wilderness consideration).

   No additional public comments addressing the wilderness characteristics of the unit were received. Following the inventory, a lapidary society wrote opposing further inventory of study because of BLM's failure to portray on maps all roads and its lack of attention to mineral resources, including operating mines, mineral locations, and mining claims.

   Three letters were added during the Intensive Inventory. All agreed with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation and the need to protect this area, as one of the best examples of wild lands in the west.

2. Study Phase: The draft Yuma Resource Management Plan (RMP) and EIS recommended the WSA and several other WSAs in the Yuma District be recommended unsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness than was recommended by BLM. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs

within the planning area be designated suitable. One writer noted that the rigorous screening process had eliminated all but the most outstanding WSAs. Two respondents suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

Only three comments were specific to this WSA. The Yuma Audubon Society disagreed with the Bureau's statement that the unit has low wilderness values. The society mentioned the presence of bighorn sheep, desert tortoise and a moderate potential for cultural resources. Man-made conflicts are absent, and the adjacent CDCA WSA has been recommended as suitable. They also noted the lack of mining claims and the low mineral, gas, oil, and geothermal potential. A regional mining council noted that this unit has significant potential for gold and geothermal resources. One individual respondent requested a recommendation of suitable for this particular WSA.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be recommended unsuitable for wilderness. Many respondents supported the general "no-wilderness" position for the Yuma District. Their major concerns were the need for motorized vehicle access for mineral exploration, recreation, and maintenance of water facilities for wildlife. An equally large number of respondents, including the Sierra Club, favored wilderness designation for all of the WSAs within the District.

   Six comments specifically mentioned this WSA. Respondents opposing a suitable recommendation were concerned about mining access. The Arizona Mining Association and a representative of the precious metals industry wanted this area to be left open. The Bureau of Reclamation supported the unsuitable recommendation, since this would allow development of the Park Moabi Quarry.

   The Yuma Chapter of the Audubon Society and an individual respondent wanted a suitability recommendation. The Society urged that if Congress declares the adjoining Chemehuevi Mountains WSA in California as wilderness, this small addition should also become wilderness.

   The California Department of Fish and Game stated that it has a 14-year plan to relocate and reintroduce desert bighorn sheep back into suitable historic ranges in the Chemehuevi Mountains, and that BLM should recognize that this program should not be hindered by restrictions on vehicle access.

   No comments were received from local government.

Chemehuevi Needles Addition

AZ-050-004

CHEMEHUEVI/NEEDLES ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-004)

1. THE STUDY AREA --- 938 acres

The Chemehuevi/Needles Addition WSA is near the Colorado River in eastern San Bernardino County, California, about five miles south of Topock, Arizona. The study area consists entirely of public land administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1). This WSA is within Arizona BLM's Yuma District, but is contiguous with California Desert District's Chemehuevi Mountains WSA (CDCA-310). Chemehuevi/Needles Addition WSA shares both its west and south boundary with CDCA-310. The Havasu National Wildlife Refuge forms the WSA's north and east boundaries.

The WSA consists of gently rolling hills, dissected by washes that drain eastward into the Colorado River. The vegetative cover is sparse, with creosote bush, bur sage, and cholla cactus predominating. Palo verde and ironwood are present in some of the washes.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EISs) for the Proposed Wilderness Program for the Yuma District: all wilderness and no wilderness.

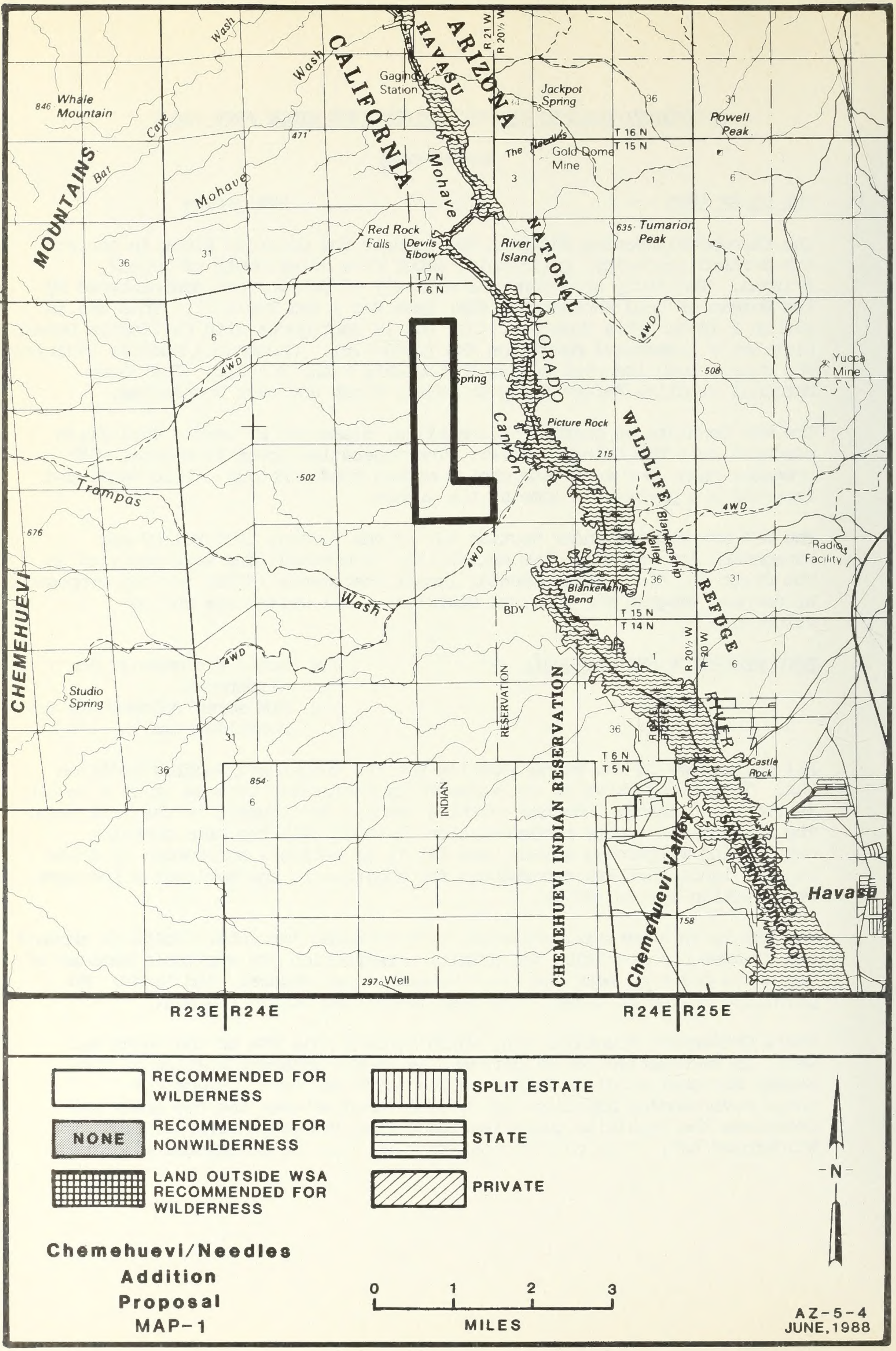
2. RECOMMENDATION AND RATIONALE ---

938 acres recommended for wilderness
0 BLM acres recommended for nonwilderness

All wilderness is the recommendation for the Chemehuevi/Needles Addition WSA. This alternative is environmentally preferable because it will result in the least change from the existing natural environment in the long term. The rationale for this recommendation is that: (1) the area contains outstanding wilderness values, and (2) it is entirely surrounded by other Federal lands that are recommended for addition to the National Wilderness Preservation System (NWPS).

The WSA is in a natural condition, with no human imprints. Solitude abounds and diverse opportunities for primitive recreation are available because of the WSA's position near the river between other Federal wild lands. No primitive routes of travel have been identified within the WSA.

BLM's Chemehuevi Mountains WSA, which borders this WSA on the south and west, is recommended for wilderness, as is the adjacent portion of the Havasu National Wildlife Refuge on the north and east. Since the Chemehuevi/Needles Addition WSA is sandwiched between the two areas and possesses the requisite qualities identified in Section 2(c) of the Wilderness Act, it is only logical that it, too, be designated wilderness.



Chemehuevi/Needles Addition Proposal

MAP-1

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	938
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		938
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	938
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		938
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	0
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		0

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The unit appears to have been affected primarily by the forces of nature. The imprint of man's work is not present. No roads or off-highway vehicle (OHV) ways are within the area.
2. Solitude: The unit offers ample opportunities for solitude when considered as an integral part of either the proposed wilderness administered by Havasu National Wildlife Refuge, or the BLM Chemehuevi Mountains WSA. The unit is surrounded on all sides by these areas.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The WSA offers diverse opportunities for primitive and unconfined recreation when considered as an integral part of the proposed wilderness administered by the Havasu National Wildlife Refuge or the Chemehuevi Mountains WSA.

4. Special Features: Chemehuevi/Needles Addition WSA is situated at the western edge of Topock Gorge, and appears to possess at least some of the natural values found in the gorge. Topock Gorge includes one of the few remaining portions of the lower Colorado River that is free-flowing, unchanneled, and not heavily populated. It also includes excellent examples of past and present river channelization. It is an extremely rugged and scenic area that harbors 45 species of mammals and over 265 species of birds. Topock Gorge is proposed as an Arizona State Natural Area, and has also been proposed for designation as a National Natural Landmark in two Department of the Interior commissioned reports. The boundaries for these proposals include all of the WSA.

   The WSA includes habitat for the desert tortoise (Gopherus agassizi), under status review by the U.S. Fish and Wildlife Service for possible listing as a threatened or endangered species. The Chemehuevi Mountains also provide habitat for desert bighorn sheep, a California state-listed rare species that inhabits isolated rough canyon and mountain terrain.

   This WSA includes a small portion of the Chemehuevi Mountains, which have high religious value for the Mohave, Chemehuevi, and Halchidoma tribes. This traditional value is attributed to the mountain system as a whole, as well as specific locations within the mountains. However, no areas of sensitivity have been identified within the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 938 acres of the American Desert/Creosote Bush ecosystem. The WSA is located where the Sonoran and Mojave Deserts meet. Designation of this area as wilderness would not add diversely to the NWPS. The WSA's position between these two desert ecosystems, combined with its location on the Colorado River, gives this area an uncommonly rich diversity of plant and animal species.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
American Desert/Creosote Bush	1	343,753	117	4,266,971
	CALIFORNIA			
American Desert/Creosote Bush	1	343,753	88	3,653,167

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of four major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The closest designated wilderness is in Joshua Tree National Monument, 60 air miles southwest. Nine BLM study areas recommended for wilderness designation are within 50 air miles of the Chemehuevi/Needles Addition WSA, five in Arizona's Phoenix District, one in Arizona's Yuma District, and three in the California Desert District.

C. Manageability

The Chemehuevi/Needles Addition WSA is manageable as wilderness. The area is entirely surrounded by recommended wilderness, it contains no State or private inholdings, is under a U.S. Bureau of Reclamation (USBR) withdrawal, and contains no valid mining claims or mineral leases. The above factors virtually eliminate manageability conflicts and make the area relatively easy to manage.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Chemehuevi/Needles Addition WSA is located within the BLM Sacramento Mountains Geology-Energy-Minerals (G-E-M) Resource Area (GRA). The Draft Yuma District EIS (1987) for Arizona did not address the mineral potential of the WSA.

   Maps in the 1980 CDCA Plan do not show any areas classified for mineral resource potential within the WSA. However, the CDCA Plan did show that the southern part of the WSA (about one-half square mile) was within an anomalous gamma-ray zone for uranium and/or thorium as interpreted from airborne survey data.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: A U.S. Geological Survey (USGS) and U.S. Bureau of Mines (BOM) mineral survey has been conducted for the WSA (USGS open file report 87-586).

   The western boundary of the WSA is adjacent to the CDCA Chemehuevi Mountains WSA (CDCA-310) which was assessed by a combined mineral survey summary report prepared in 1983 by USGS and BOM. The report, Mineral Resource Potential of the Chemehuevi Mountains Wilderness Study Area... accompanies Map MF-1584-A. This report concluded that the adjacent WSA had low potential for the occurrence of mineral resources, including radioactive mineral resources. Map MF-1584-A shows that the northern part of the subject WSA is comprised of what appears to be mostly Mesozoic metamorphic rocks (layered gneiss and migmatite), and the southern part is mostly Tertiary-age volcanic and sedimentary rocks. These two units are separated by a low-angle normal fault (detachment), with the Tertiary units comprising the upper plate. Part of the detachment fault is bordered by Precambrian gneiss and granite. In some parts of the CDCA WSA, this unit contains sparsely distributed mineralized areas of low mineral resource potential, consisting of small copper-barite-silver vein systems carrying minor lead, gold, and zinc.

The USGS/BOM mineral survey report of 1988 indicated that the WSA has low mineral resource potential for copper, lead, inc, manganese, gold, silver, sand and gravel, building stone, aggregate, uranium, thorium, oil, gas and geothermal resources.

The above data suggests that the subject WSA has low potential for the occurrence of mineral resources. Therefore, no mineral potential map is included with this report. Current exploration interest is unknown since the WSA is under a USBR withdrawal. As of January 1988 and according to BLM records, there are no unpatented mining claims, mineral sales or leases in the WSA.

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Wilderness Values	Wilderness designation would maintain the wilderness values of naturalness and primitive recreation across 938 acres. The projected increase in nonmotorized recration use from 10 to 20 VDY would reduce opportunities for solitude within the WSA.	Due to the area's isolation and lack of motorized recreation access and anticipated actions, no loss or impairment of the wilderness vlaues of naturalness and primitive recreation is expected on 938 acres. The projected increase in nonmotorized recreation use from 10 to 30 VDY would reduce opportunities for solitude within the WSA.
Nonmotorized Recreation Use	Opportunities for nonmotorized recreation use would not change under the Proposed Action/All Wilderness Alternative.	Opportunities for nonmotorized recreation use would not change under the No Wilderness Alternative.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District FEIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

The following is a summary of all comments received. Known inaccuracies are noted in parentheses.

1. Inventory Phase: No comments addressing the wilderness characteristics of the unit were received during the Initial Inventory. Following the inventory, a lapidary society wrote opposing further inventory or wilderness consideration for this unit, because of BLM's failure to portray on maps all roads and its lack of attention to mineral resources, including operating mines, mineral locations, and mining claims.

   Three letters were added during the Intensive Inventory period. All were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area, which is one of the best examples of wild lands in the west.

2. Study Phase: Draft Yuma Resource Management Plan (RMP) and EIS. The Draft RMP recommended that this WSA and several other WSAs in the Yuma District be recommended suitable for wilderness. Many respondents supported this general recommendation, while others opposed it.

   Five respondents specifically mentioned this WSA. The Yuma Chapter of the Audubon Society approved the BLM's recommendation of wilderness suitability for this unit. They noted its wildlife resources, the lack of mining claims and the low potential for mineral, gas, oil, and geothermal resources. They also noted that the adjoining WSA in the CDCA has been recommended as suitable and that a wilderness recommendation would be appropriate for this WSA. The California Department of Fish and Game noted that the mule deer occurs in this unit.

   A regional mining council stated that this unit has significant potential for gold and geothermal resources. The California Division of Mines and Geology said that the wilderness recommendation for this area could prevent mineral exploration. One individual respondent requested that this WSA be designated suitable for wilderness.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be recommended suitable for wilderness. Many respondents supported wilderness for this unit, as well as a suitability recommendation for all of the WSAs in the Yuma District. Other respondents were equally opposed to wilderness for this and other WSAs, mostly because of concern over access for mineral exploration and development of claims.

Five comments specifically mentioned this WSA. The Arizona Mining Association and a representative of the precious metals industry wanted this area to be left open.

The Yuma Chapter of the Audubon Society and an individual respondent wanted a suitability recommendation. The Society urged that if Congress declares the adjoining Chemehuevi Mountains WSA in California as wilderness, this small addition should also become wilderness.

The California Department of Fish and Game stated that it has a 14-year plan to relocate and reintroduce desert bighorn sheep back into suitable historic ranges in the Chemehuevi Mountains, and that BLM should recognize that this program should not be hindered by restrictions on vehicle access.

No comments were received from local government.

Whipple Mountains Addition

AZ-050-010

WHIPPLE MOUNTAINS ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-010)

1. THE STUDY AREA --- 1,463 acres

The Whipple Mountains Addition WSA is located in San Bernardino County. Parker, Arizona, located roughly five miles northwest is the closest community. The WSA consists of 1,343 acres of Bureau of Reclamation withdrawn public land, administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1).

This WSA is contiguous with the Whipple Mountains WSA (CDCA-312). The Whipple Mountains Addition WSA is bounded on the west by the Whipple Mountains WSA. To the south, the WSA boundary is delineated by private land and to the east, the boundary follows a maintained powerline road.

The unit includes a portion of the rugged eastern Whipple Mountains, and is dissected by four small washes. Vegetation is sparse, consisting of creosote bush, brittle bush and cholla, with palo verde in the washes.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Three different suitability recommendations were analyzed in the Yuma District Wilderness Environmental Impact Statement: all wilderness, no wilderness and a 90% suitable partial wilderness alternative recommending 1,343 acres for wilderness designation.

2. RECOMMENDATION AND RATIONALE ---

1,343	acres recommended for wilderness
120	BLM acres recommended for nonwilderness

Ninety percent suitable partial wilderness is the recommendation for this WSA. The 120 acres in this WSA recommended nonsuitable are released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The all-wilderness recommendation is environmentally preferable. This is because it would result in the least change from the existing natural environment over the long term. It is not the recommendation for this WSA, however, for the reasons described above.

The western portion of this WSA is recommended for wilderness designation because: (1) when considered as an integral part of the suitably recommended Whipple Mountains WSA, the unit is in a nearly undisturbed natural state and possesses outstanding wilderness values; (2) the unit is a logical extension of the suitably recommended Whipple Mountains WSA; and (3) the unit possesses many special features.

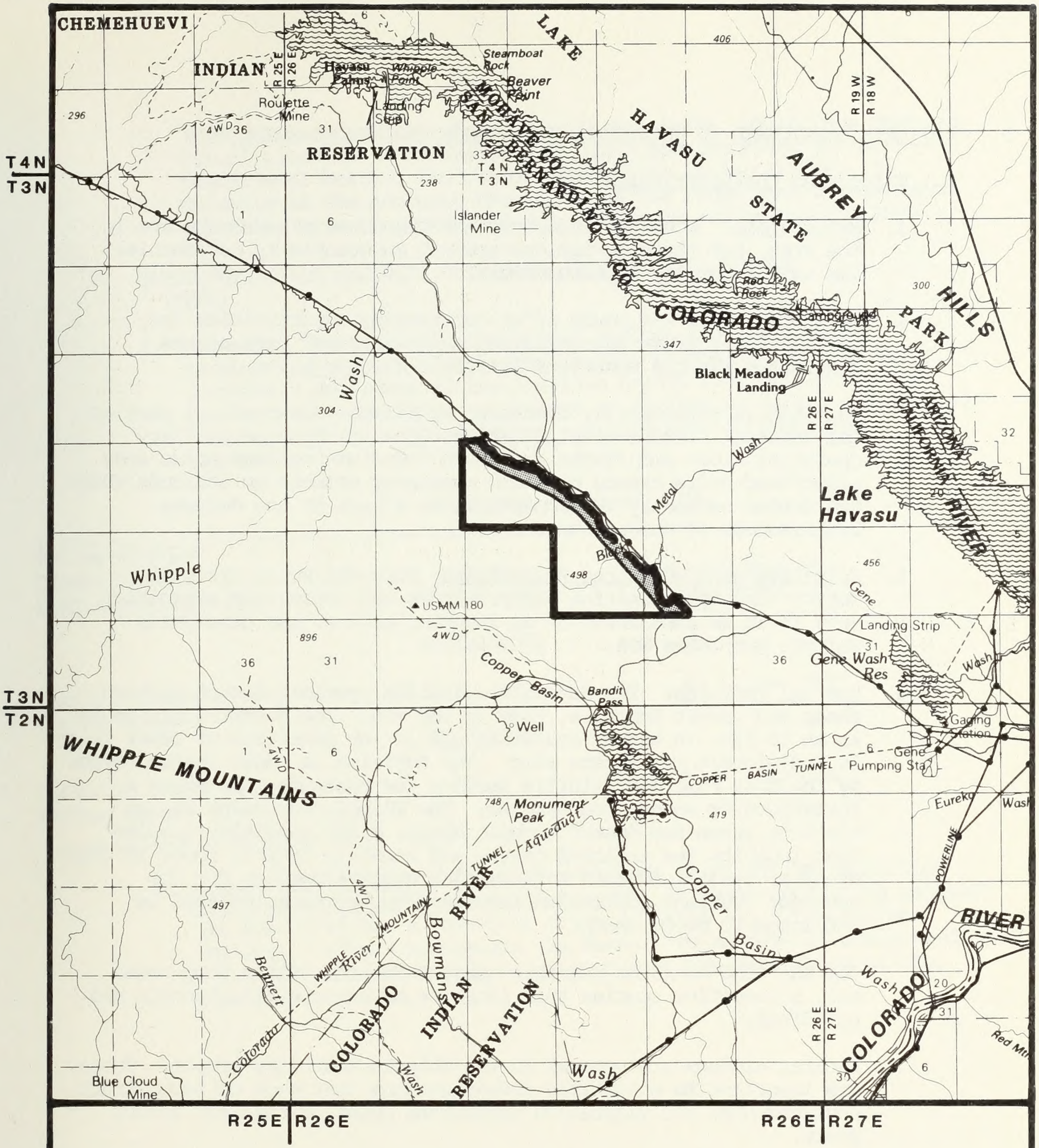
The area's wilderness values of naturalness, opportunities for solitude and for primitive and unconfined types of recreation, are outstanding when considered as a part of the adjacent study area. Within the Whipple Mountains Addition WSA, natural features have been influenced primarily by the forces of nature. The area is located contiguous with the eastern border of the Whipple Mountains WSA. This proximity enhances the wilderness values and opportunities to be had in both WSAs. The suitability recommendation will preclude any further vehicular use of approximately two miles of primitive access routes of travel.

Within this small unit, there are many special features. The area contains crucial habitat for desert bighorn sheep and supports other sensitive desert life forms such as the desert tortoise and barrel cactus.

The 120 acres along the WSA's east side are not recommended for wilderness. These lands are within a utility corridor and their use is important for the maintenance of the existing structures.

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	1,463
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		1,463
Within the Recommended Wilderness Boundary		**Acres**
BLM	(within WSA)	1,343
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		1,343
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		**Acres**
BLM	(surface and subsurface)	120
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		120



Whipple Mountains Addition Proposal MAP-1

AZ-5-10
JUNE, 1988

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: Numerous prospects and abandoned mine shafts are in the area, but these operations are not substantially noticeable. The unit generally appears natural.

2. Solitude: This WSA would offer outstanding opportunities for solitude only if it is considered as an integral part of the contiguous Whipple Mountains WSA.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: This WSA would offer outstanding opportunities for primitive and unconfined recreation only if it is considered as an integral part of the contiguous Whipple Mountains WSA.

4. Special Features: Two sensitive wildlife species, desert bighorn sheep and desert tortoise, live in the WSA. The desert tortoise is known to live in washes and foothills in low densities of fewer than 20 individuals per square mile. The tortoise is under status review by the U.S. Fish and Wildlife Service for possible listing as a threatened or endangered species. The Whipple Mountains are an historic range for desert bighorn sheep, a BLM sensitive species that inhabits the isolated canyon and mountain terrain found in this study area. All of this WSA contains crucial habitat for the species. Current population for the Whipple Mountains herd is estimated to be 85 sheep.

   The WSA also contains possible habitat for the little long-nosed bat, a sensitive species that inhabits caves, old mine tunnels and buildings.

   Packrat middens are present in the Whipple Mountains proper. These are important to scientific investigations that seek to reconstruct environmental and vegetation conditions spanning the past 40,000 years.

   The Whipple Mountains WSA has the largest of only a few stands of saguaro cactus found in California. The barrel cactus may also be found on gravelly or rocky slopes, canyon walls, gravelly fans and wash margins at 600 to 3,000 feet elevation. This WSA is one of the few locations for foothills palo verde, which hybridizes with blue palo verde along the Colorado River Aqueduct.

This WSA is a portion of the Whipple Mountains, which have numerous ritual sites and mountainous areas that are important in the traditional beliefs for the Colorado River Indian Tribes. A majority of the geologic formations in the range have significance for these tribes. There are many trails in and across the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: The Whipple Mountains Addition WSA contains 1,463 acres of the American Desert Province/Palo Verde-Cactus Shrub vegetative assemblage as defined by Bailey and Kuchler. Inclusion of this WSA would not add diversity to ecosystem representation in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification	NWPS Areas		Other BLM Studies	
Domain/Province/PNV	areas	acres	areas	acres
	NATIONWIDE			
American Desert/Palo Verde-Cactus Shrub	2	271,403	42	1,544,287
	CALIFORNIA			
American Desert/Palo Verde-Cactus Shrub	0		11	592,308

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of three major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of seven BLM WSAs recommended for wilderness designation. The closest designated wilderness areas are located in Joshua Tree National Monument, located approximately 75 miles southwest.

C. Manageability

The Whipple Mountains Addition WSA is manageable as wilderness when considered as an integral part of the larger contiguous Whipple Mountains WSA. However, there are issues which complicate manageability.

The boundaries of this unit are easily manageable. To the west and south, adjacent land uses are compatible with wilderness, and preclude entry of motorized vehicles into the area. The eastern boundary, a maintained dirt road, is easily discernable and use along it would be relatively simple to control.

At the present time, the entire unit is withdrawn by the U.S. Bureau of Reclamation (USBR).

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Whipple Mountains Addition WSA is located in the BLM Whipple Mountains Geology-Energy-Minerals (G-E-M) Resource Area (GRA). The Draft Yuma District EIS (1987) for Arizona states that base and precious metal mineralization related to detachment faulting occur in the Whipple Mountains. Hydrothermally

deposited barium, manganese, iron, copper, gold, and silver are found in rocks ranging in age from Precambrian to Miocene. Although no mineral deposits in economic quantities were reported from the WSA, significant metallic deposits were known within a few miles. The Copper Basin Mine, two miles from the southern boundary of the WSA, produced copper prior to World War II and has demonstrated reserves of 7,200 tons of copper. The Monument King and Moulton Mines, approximately five miles to the southeast, produced more than 702 tons of manganese during the two world wars. Nearby deposits with recorded production and the mineral potential of the adjacent Whipple Mountains WSA indicated a moderate potential for metallic mineralization in this WSA.

The Whipple Mountains GRA report stated that although recorded production figures are virtually nonexistent, written descriptions indicate that many mines were producing. Known production and reserves indicated that copper and gold were the most important commodities found in the Whipple Mountains. Over 12 million tons of ore averaging 0.544 percent copper (equivalent to 139 million pounds of copper) had been delineated in the Copper Basin area, one mile south of the WSA. The Roulette Mine, three miles north of the WSA, produced about 270 ounces of gold. The Rincon Mine produced at least 5,000 pounds of copper and about 50 ounces of gold. Placer gold was also produced from Whipple Wash, two miles west of the WSA. During both World Wars, 144,900 pounds of manganese were produced from the Monument King Mine and 18,830 pounds were produced from the Stewart Mine. The Black Metal Mine, one-half mile northeast, produced rich silver ore before 1880.

The GRA file shows the WSA within an area classified as having high potential for the occurrence of metallic resources based on past producers and/or resources associated with a favorable geologic environment. The GRA file shows the WSA within an area having a geochemical anomaly for molybdenum, silver, zinc, and lead. The combination of favorable geology, geochemical anomaly, claim staking, and past exploration interest within the WSA and surrounding past producers support the high mineral potential.

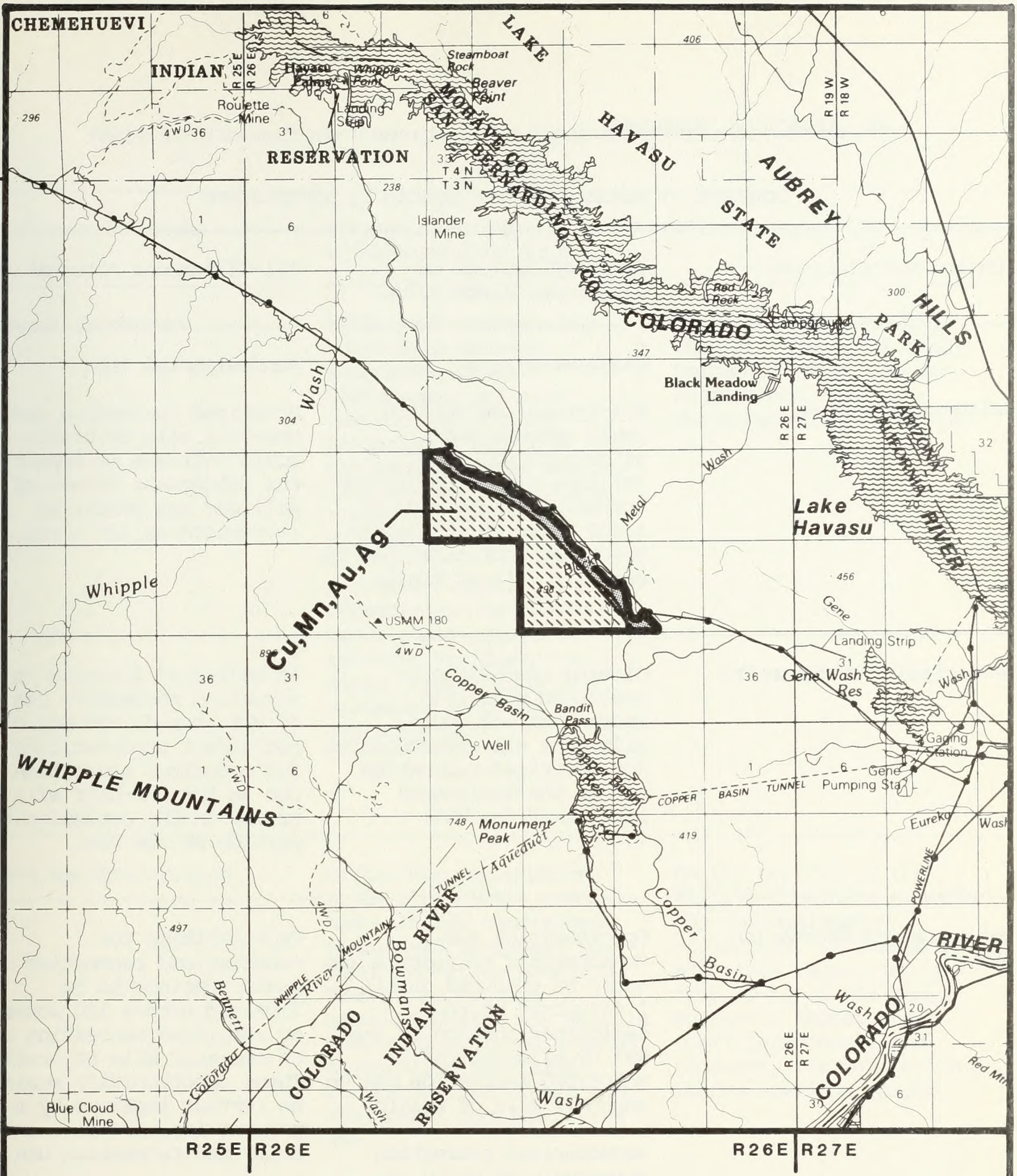
2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: All but the northeast edge of the WSA is adjacent to the Whipple Mountains WSA which was assessed for mineral potential by USGS and U.S. Bureau of Mines (BOM) in 1980. The results of these surveys were published as Open File Report (OFR) 82-956, released in 1982. The USGS and BOM report indicates that the mineralized zones in the adjacent Whipple Mountains WSA are predominantly associated with either a detachment fault system or granitic plutons. The major mineralization occurs along the perimeter of the WSA with only minor mineralization toward the center. Areas of moderate to high mineral resource occurrence potential were described in the USGS and BOM report. Along the western boundary of the WSA, the Whipple Mountain detachment fault system was found to have a moderate to locally high potential for

the occurrence of gold, silver, and base metals such as copper, arsenic and molybdenum. This mineralization occurs on both the upper and lower fault plates.

The WSA is associated with the granitic plutons, similar to the geologic environments in the adjacent CDCA WSA. Map 2 shows that the WSA is classified as having a high potential for the occurrence of gold, silver, and copper based on the GRA classification, and the supporting data from the USGS and BOM for the adjacent CDCA WSA.

Adjacent to the WSA, in the eastern portion of the CDCA WSA, the area was assessed as having speculative potential for uranium based on aerial anomalies and scintillometer readings taken during field visits. A BLM classification of low potential for occurrence of uranium is assigned to the WSA because the anomalies in USGS and BOM report prepared for the adjacent WSA appear to be associated with Tertiary volcanic rocks which are almost entirely excluded from the WSA.

As of January, 1988, no mineral sales or leases had been issued within this WSA. The WSA is under a USBR withdrawal which segregates the subject WSA from location and entry under the mining laws.



☐	Recommended for Wilderness
▩	Recommended for Non Wilderness
▦	Land outside WSA Recommended for Wilderness
▥	Split Estate
▤	State
▨	Private

Explanation

▧	High Potenial for the Occurrence of Energy and/or Non-energy Minerals
░	Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals
M	Moderate Mineral Potential Location in a High Mineral Potential Area
H	High Mineral Potential Location in a Moderate Mineral Potential Area

Commodity Symbols

Ag	Silver
Au	Gold
Cu	Copper
Mn	Manganese

N

0 1 2 3
MILES

Whipple Mountains
Addition
Mineral Resource Potential

MAP-2
AZ-5-10

E. Impact on Resources

Table 4
Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
	Designated Area	**Nondesignated Area**
Wilderness Values	Wilderness designation would enhance the wilderness values of solitude and primitive and unconfined recreation on 1,463 acres by eliminating motorized recreation use on one-half mile of trails.	Motorized recreation use on one-half mile of trails would continue to impair the wilderness values of solitude and primitive recreation on 120 acres.
Motorized Recreation Use	Closing one-half mile trails to motorized recreation use would eliminate all opportunities for motorized recreation use in the designated portion of the WSA.	An estimated increase in motorized recreation use to 60 VDY from 50 VDY would not affect opportunities for motorized recreation use on the one-half mile of trails in the nondesignated portion of the WSA.
Nonmotorized Recreation Use	Opportunities for nonmotorized recreation use would be enhanced on all 1,463 acres of the designated portion of the WSA by eliminating motorized recreation use on one-half mile of trails. Nonmotorized recreation opportunities would be lessened across 1,463 acres by the development of two surface mines on claims with valid existing rights.	Opportunities for nonmotorized recreation use would continue to be impaired across 120 acres by motorized recreation use on one-half mile of trails. These opportunities would be further impaired by a 20 percent increase in motorized recreation use. Opportunities for nonmotorized recreation use would be occasionally impaired across 120 acres by powerline maintenance activities.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Cultural Resources	Wilderness designation would help prevent vandalism, casual disturbance and site destruction at one potentially eligible National Register site by closing one-half mile of trails to motorized recreation use. Increased visitation by nonmotorized recreation users could result in isolated incidents of casual disturbance, vandalism or site destruction.	Nondesignation of this portion of the WSA would probably not affect any significant cultural resources within the WSA.
Native American Values	Wilderness designation would benefit the natural and cultural conditions considered necessary to maintain Native American traditional values associated with the Whipple Mountains Addition area by eliminating motorized recreation use within the designated portion of the WSA.	On the portion of the Whipple Mountains Addition WSA not designated wilderness, increases in motorized recreation use from 50 to 60 VDY could adversely impact the conditions considered necessary for maintaining Native American values.
Crucial Wildlife Habitat		No impacts to crucial bighorn sheep habitat are projected in the nondesignated portion of the WSA.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Special Status Wildlife Species	Wilderness designation would minimize the potential for motor vehicles crushing desert tortoise individuals and burrows by closing one-half mile of trails to motorized recreation use.	Motorized recreation use on one-half mile of trails would continue to occasionally crush desert tortoise individuals and their burrows.
Wilderness Values	Wilderness designation would enhance the wilderness values of solitude and primitive and unconfined recreation on 1,463 acres by precluding powerline maintenance activities and eliminating motorized recreation use on one mile of trails. The projected increase in nonmotorized recreation use from 40 to 100 VDY would reduce opportunities for solitude within the WSA.	Motorized recreation use on one mile of trails and 1.75 miles of mine roads would continue to impair the wilderness values of naturalness, solitude and primitive recreation opportunities on 1,463 acres. The projected increase in motorized recreation use from 60 to 125 VDY would further impair solitude and primitive recreation opportunities in this area. Powerline maintenance activities would cause a loss or impairment of wilderness values of naturalness, solitude and primitive recreation opportunities on 120 acres. The projected increase in nonmotorized recreation sue from 40 to 75 VDY would reduce opportunities for solitude within the WSA.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Motorized Recreation Use	Closing one mile of trails to motorized recreation use would eliminate all opportunities for motorized recreation use within the WSA.	An estimated increase in motorized recreation use to 125 VDY from 60 VDY would not affect opportunities for motorized recreation use on the one mile of trails within the WSA, except for some impairment during heavy use periods.
Nonmotorized Recreation Use	Opportunities for nonmotorized recreation use would be enhanced on all 1,4653 acres of the WSA by precluding powerline maintenance activities, and by eliminating motorized recreation use on one mile of trails.	Opportunities for nonmotorized recreation use would continue to be impaired across 1,380 acres by motorized recreation use on one mile of trails. These opportunities would be further impaired by a 108 percent increase in motorized recreation use. Opportunities for nonmotorized recreation use would be occasionally impaired across approximately 120 acres by powerline maintenance activities.
Cultural Resources	Wilderness designation would help prevent vandalism, casual disturbance and site destruction at one potentially eligible National Register site by closing one mile of trails to motorized recreation use.	One potentially eligible National Register site could be adversely impacted by casual disturbance, vandalism or destruction resulting form increased visitation by recreation users.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	Proposed Action/ No-wilderness Alternative	All-Wilderness Alternative
Native American Values	Wilderness designation would benefit the natural and cultural conditions considered necessary to maintain Native American traditional values associated with Whipple Mountains Addition area by eliminating motorized recreation use within the WSA.	Increase in recreation use from 100 to 200 VDY would impair the conditions considered necessary to maintain Native American traditional values associated with the Whipple Mountains Addition area.
Special Status Wildlife Species	Wilderness designation would minimize the potential for motor vehicles crushing desert tortoise individuals and burrows by closing one mile of trails to motorized recreation use.	Motorized recreation use on one mile of trails would continue to occasionally crush desert tortoise individuals and their burrows.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District Wilderness EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: During the Initial Inventory, USBR, Lower Colorado Region, noted that the Whipple Wash Pump Storage Project will require 500-kv powerline corridors and other appurtenant structures which may traverse or encroach on the potential wilderness area.

   No comments addressing the wilderness characteristics of the unit were received. Following the inventory, a lapidary society wrote opposing further inventory of study of this unit because of BLM's failure to portray on maps all roads and its lack of attention to mineral resources, including operating mines, mineral locations, and mining claims.

Four letters were added during the Intensive Inventory period. Three were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area, which is one of the best examples of wild lands in the west. The fourth letter stated that mine workings and vehicle routes are scattered over portions of the unit.

2. Study Phase: Draft Yuma Resource Management Plan (RMP) and EIS. The Draft RMP recommended that this WSA and several other WSAs in the Yuma District be recommended unsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness than was recommended by the Bureau. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs within the planning area be designated suitable. One writer noted that the rigorous screening process had eliminated all but the most outstanding WSAs. Two people who commented suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

   Five respondents mentioned this particular WSA. The Yuma Audubon Society pointed out the inconsistency of the RMP/EIS in evaluating the wilderness values of this WSA both high and moderate. The society also noted the high ranking of the adjacent Whipple Mountains WSA in the California Desert District (8th out of 137 WSAs). They stated that a wilderness designation would not interfere with other uses, since the area is not used for grazing or for off-highway vehicle (OHV) recreation, it has only nine mining claims, and its wilderness designation are the wildlife values, the potential for cultural resources, the rugged habitat and opportunities for primitive recreation, and the absence of visible man-made features.

   The California Resources Agency (the Department of Fish and Game) stated that mule deer are present in this unit, but that their number is declining because of residential development near the Colorado River. The California Division of Mines and Geology stated that this general area has occurrences of copper, silver, and gold and that a wilderness recommendation could prevent mineral exploration. Two respondents wanted this WSA designated suitable for wilderness.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program changed the recommendation for this WSA from No-Wilderness to Partial-Wilderness; 1,343 acres would be suitable, and the remaining 120 acres, which lie along the eastern border of the unit, would be unsuitable. These 120 acres are part of a utility corridor and would be used for maintenance of a proposed powerline. Many respondents supported the Bureau's recommendations; some wanted the entire WSA recommended suitable;

and a large number wanted no-wilderness here because of concerns about mineral exploration and access to claims.

Six comments addressed this specific WSA. Four respondents opposed wilderness here, including two individual miners, a representative of the precious metal industry, and the Arizona Mining Association. The area is known to have potential for mineralization, particularly gold and silver. One respondent approved BLM's partial-wilderness recommendation, and another, the Yuma Chapter of the Audubon Society, wanted the entire WSA to be designated wilderness.

No comments were received from local government.

Big Maria Mountains North Addition

AZ-050-018

BIG MARIA MOUNTAINS NORTHERN ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-018)

1. THE STUDY AREA --- 495 acres

The Big Maria Mountains Northern Addition WSA is located in Riverside County, roughly 30 miles north of Blythe, California. The WSA is composed entirely of Bureau of Reclamation withdrawn public land, administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1).

This WSA is contiguous with the Big Maria Mountains WSA (CDCA-321). The Big Maria Mountains Northern Addition WSA is bounded on the north and west by the Big Maria Mountains WSA boundary. To the south, the WSA boundary is delineated by private land. On the east side, the boundary follows a transmission line and the Colorado River Indian Reservation boundary.

The area embraces a small section of an extensive bajada sloping eastward from the Riverside Mountains to the Colorado River. The slopes, dissected by washes, are almost entirely covered by desert pavement. Vegetation consists mostly of ironwood, confined to the washes.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two different suitability recommendations were analyzed in the Yuma District Wilderness Environmental Impact Statement: no wilderness and all wilderness.

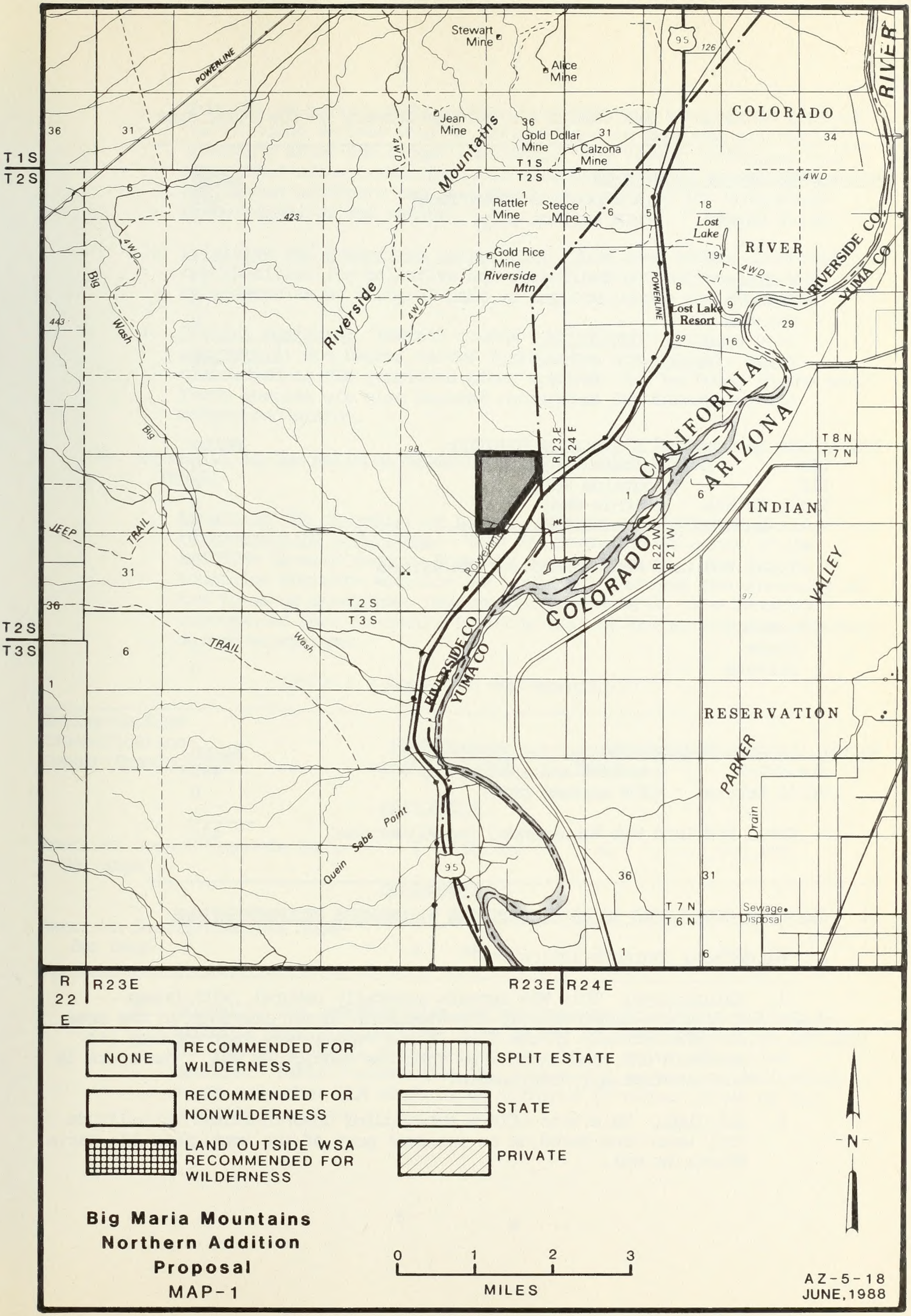
2. RECOMMENDATION AND RATIONALE --- 0 acres recommended for wilderness
495 BLM acres recommended for nonwilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The all-wilderness recommendation is environmentally preferable as it would result in the least change from the existing natural environment over the long term.

This WSA is not recommended for wilderness designation because the contiguous Big Maria WSA is not recommended for wilderness designation, and alone, this small parcel does not contain sufficient acreage or wilderness values to stand on its own as a wilderness area.

The Big Maria Northern Addition WSA does not provide outstanding opportunities for solitude and primitive and unconfined types of recreation as an autonomous unit. Only when included with the larger Big Maria Mountain WSA do this WSA's wilderness values and size sufficiently satisfy the criteria set forth in Section 2(c) of the 1964 Wilderness Act. Consequently, on its own the WSA fails to meet two of the three criteria, eliminating the area from consideration as wilderness. No routes of travel have been identified within the WSA.



Big Maria Mountains
Northern Addition
Proposal
MAP-1

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	495
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		495
Within the Recommended Wilderness Boundary		**Acres**
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		**Acres**
BLM	(surface and subsurface)	495
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		495

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: This WSA appears generally natural, with human influences substantially unnoticeable. Human imprints in the area are present only in the form of one vehicle-way that crosses its southern end, and extends on into the contiguous WSA. The route is not substantially noticeable.

2. Solitude: This area offers outstanding opportunities for solitude only when considered as an integral part of the contiguous Big Maria Mountains WSA.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: This area offers outstanding opportunities for primitive and unconfined recreation only when considered as an integral part of the contiguous Big Maria WSA .

4. Special Features: Foxtail cactus (*Coryphantha vivipara* var. *alversonii*) and barrel cactus (*Ferocactus acanthodes*), both classified as BLM sensitive plant species, may be found in the WSA. These species are also Federal candidates for threatened and endangered status.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 495 acres of the American Desert/Creosote Bush-Bur Sage ecosystem. The Big Maria Mountains Northern Addition WSA would not increase the diversity of the types of ecosystems represented in the NWPS. The landform represented here generally reflects that of the surrounding Colorado desert ecosystems.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
American Desert/Creosote Bush-Bur Sage	3	126,033	48	1,571,570
	CALIFORNIA			
American Desert/Creosote Bush-Bur Sage	2	26,427	20	977,109

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of 18 BLM WSAs recommended for wilderness designation. The closest designated wilderness areas are located in Joshua Tree National Monument, located 40 miles to the west.

C. Manageability

The Big Maria Mountains Northern Addition WSA is manageable as wilderness. There are no issues which would preclude or significantly contstrain manageability of this WSA. The southeastern boundary is defined by a transmission line and would be easily recognizable by the public. The remaining boundaries follow section lines and are not easily discernable on the ground. This fact, coupled with the area's flat terrain, could result in potential problems in restricting vehicle travel. Signing would be required to eliminate intrusions.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Big Maria Mountains Northern Addition WSA is located in the BLM Big Maria Geology-Energy-Mineral (G-E-M) Resource Area (GRA). The Draft Yuma District Wilderness Environmental Impact Statement did not include an evaluation of the mineral potential of this WSA. However, the evaluation of the adjacent Riverside Mountains, part of the Big Maria WSA was addressed in the wilderness portion of the CDCA Plan EIS (Volume B, Appendix III). The CDCA EIS indicated that the Riverside Mountains

had a high potential for mineralization. In the Riverside Mountains there has been past production of gold, silver, and copper, plus several manganese deposits. The eastern portion of the Riverside mountains, which includes this WSA, was considered as having a high potential for gold, silver, copper, and manganese.

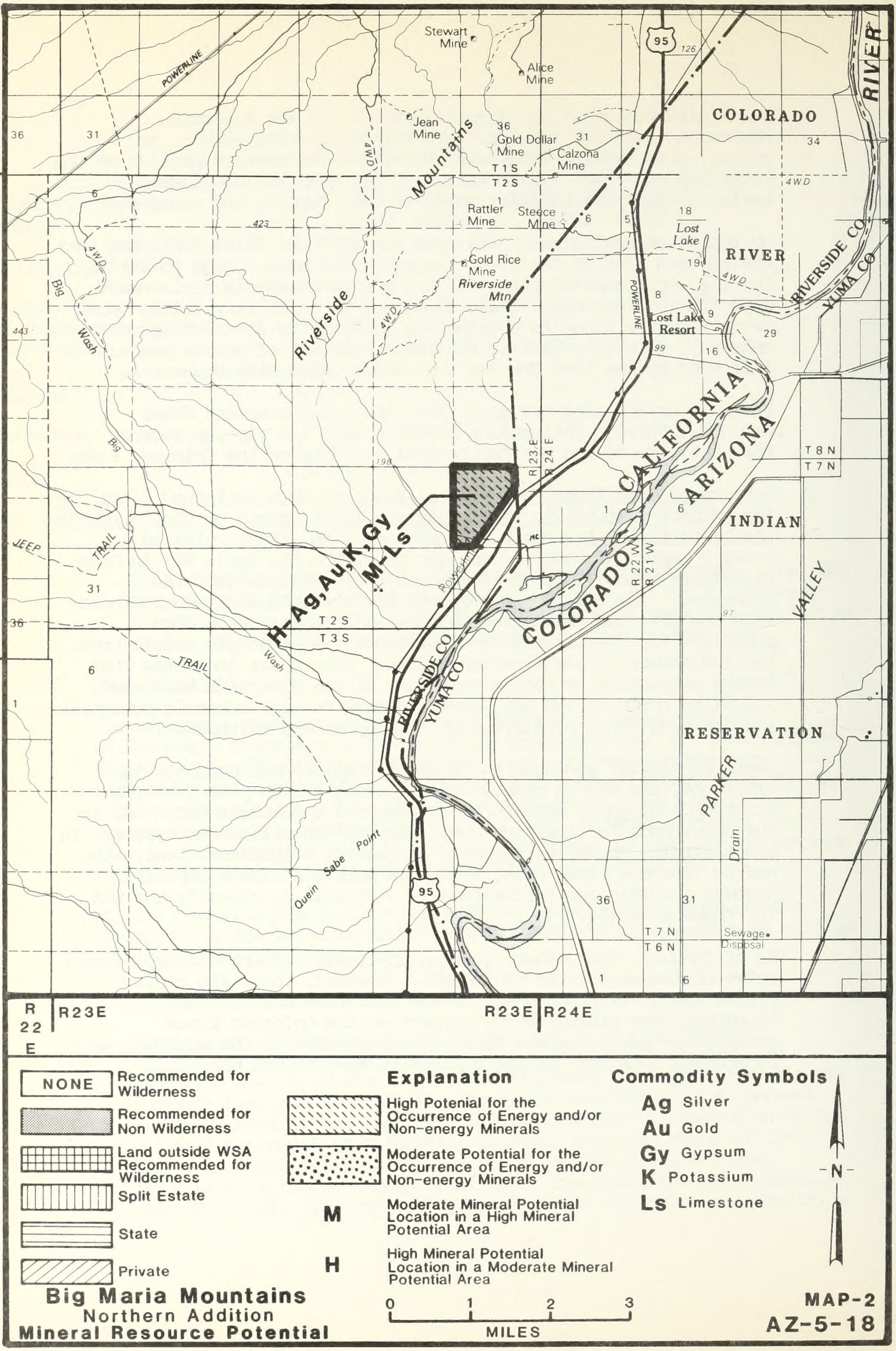
On the accompanying map, data from the 1980 GRA files indicated that the eastern side of the Riverside Mountains have a high potential for the occurrence of gold, silver, and manganese in replacement deposits in limestone. These deposits, up to 15 feet thick, were developed from mines in the Bendigo gold mining district (production unknown). A high potential for the occurrence of gypsum was also indicated by the 1980 GRA for the eastern Riverside Mountains.

In their comments to the draft EIS, the U.S. Water and Power Resources Service indicated a possible need for rip-rap sources on the east side of the WSA for federal projects on the Colorado River.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: The U.S. Bureau of Mines (BOM) released a summary report of their investigation of the Big Maria WSA in Open File Report MLA-142-82 in 1982 which includes the Riverside Mountains. The BOM report supports the 1980 GRA data and indicates that the Riverside Mountains have areas of moderate to high potential for the occurrence of precious and strategic metals under the BLM mineral classification system. The report indicates that twelve properties on the eastern side of the Riverside Mountains, six miles north of the WSA, have moderate to high economic potential for the occurrence of silver, gold, copper, and molybdenum.

   Based on similar geologic environment, replacement deposits in limestone, the WSA is classified as having a high potential for the occurrence of gold, silver, and gypsum and a moderate potential for the occurrence of limestone under the BLM classification system. In the Riverside Mountains, copper, manganese, molybdenum, lead, zinc and/or iron are often associated with gold and silver deposits, however insufficient information is available to classify the WSA for these minerals.

   As of January, 1988, there were no unpatented mining claims, mineral sales or leases located in the WSA. However, there are mining claims immediately northwest of the WSA. The WSA has been withdrawn from mineral entry as part of the Colorado River reclamation project since 1902, this accounts for the apparent lack of mineral interest (mining claims) in the subject WSA.



Big Maria Mountains
Northern Addition
Mineral Resource Potential

MAP-2
AZ-5-18

E. Impact on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Environmental Issue	Proposed Action/No-Wilderness	All-Wilderness Alternative
Wilderness Values	Motorized recreation use on 0.2 miles of vehicle ways would continue to impair the wilderness values of naturalness, solitude and primitive recreation on approximately 125 acres.	Wilderness designation would enhance and maintain the wilderness values of naturalness, solitude and primitive recreation across 495 acres by eliminating motorized recreation use on 0.2 miles of vehicle ways.
Motorized Recreation Use	Opportunities for motorized recreation use on 0.2 miles of vehicle ways within the WSA would remain unchanged under the Proposed Action/No Wilderness Alternative.	Closing 0.2 miles of vehicle ways to motorized recreation use would eliminate all opportunities for motorized recreation use within the WSA.
Nonmotorized Recreation Use	Nonmotorized recreation opportunities would continue to be impaired across approximately 125 acres by motorized recreation use.	Opportunities for nonmotorized recreation use would be enhanced within the 495-acre WSA by eliminating motorized recreation use on 0.2 miles of vehicle ways.
Cultural Resources	One potentially eligible National Register site could be adversely impacted by casual disturbance, vandalism and site destruction resulting from increased visitation by recreation users.	Wilderness designation would help prevent site vandalism, casual disturbance and site destruction at one potentially eligible National Register site by closing 0.2 miles of vehicle ways to motorized recreation use.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Environmental Issues	**Proposed Action/No Wilderness**	**All Wilderness Alternative**
Special Status Wildlife Species	Motorized recreation use on 0.2 miles of vehicle ways would continue to occasionally crush desert tortoise individuals and their burrows.	Wilderness designation would minimize the potential for motor vehicles crushing desert tortoise individuals and their burrows by closing 0.2 mile of vehicle ways to motorized recreation use.
Special Status Plants	Continued motorized recreation use on 0.2 miles of vehicle ways would preclude the revegetation of 0.3 acre of potential habitat for barrel cactus and foxtail cactus.	Wilderness designation would allow revegetation of 0.3 acres of potential habitat for barrel cactus and foxtail cactus by closing 0.2 miles of vehicle ways to motorized recreation use.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District Wilderness EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: No public comments addressing the wilderness characteristics of the unit were received during the Initial Inventory. Following the inventory, a lapidary society wrote opposing further inventory or wilderness consideration for this unit because of BLM's failure to portray on maps all roads, and its lack of attention to mineral resources, including operating mines, mineral locations, and mining claims.

   Three letters were received during the Intensive Inventory period. All were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area, which is one of the best examples of wild lands in the west.

2. Study Phase: Draft Yuma Resource Management Plan (RMP) and EIS. The Draft RMP recommended that this WSA and several other WSAs in the Yuma District be recommended nonsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness that was recommended by the Bureau. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs within the planning area be designated suitable. One writer noted that the rigorous screening process had eliminated all but the most outstanding WSAs. Two people who commented suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

   Three comments specifically mentioned this WSA. The California Department of Fish and Game stated that mule deer occur in the WSA. The California Division of Mines and Geology stated that this WSA is adjacent to a gold- and copper-bearing ridge; that mineral potential needs further review; and that withdrawal of this area could have an adverse effect on mineral exploration and development. An individual stated a strong desire that this WSA be recommended suitable for wilderness.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be recommended unsuitable for wilderness; 415 acres would be returned to other resources use. Many respondents supported the general "no-wilderness" position for this WSA and a number of other WSAs in the Yuma District. Their major concerns were the need for motorized vehicle access for mineral exploration, recreation, and maintenance of water facilities for wildlife. An equally large number of those who responded, including the Sierra Club, favored wilderness designation for all of the WSAs within the District.

   Six comments addressed this specific WSA. The Colorado River Indian Tribes wanted wilderness here because it is needed to protect some extremely valuable cultural resources. The Yuma Chapter of the Audubon Society also favored wilderness. An individual respondent, a person representing the precious metals industry, and the Arizona Mining Association all opposed wilderness for this small area because of its mineral potential.

The California Department of Fish and Game noted the presence of burro deer in this general area and stated that it has a 14-year plan to relocate and reintroduce desert bighorn sheep back into suitable historic ranges in the Big Maria Mountains, and that BLM should recognize that this program should not be hindered by restrictions on vehicle access.

No comments were received from local governments.

Big Maria Mountains South Addition

AZ-050-019

BIG MARIA MOUNTAINS SOUTHERN ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-019)

1. THE STUDY AREA --- 1,431 acres

The Big Maria Mountains Southern Addition WSA is located in Riverside County, roughly 12 miles north of Blythe, California. The WSA is composed entirely of U.S. Bureau of Reclamation (USBR) withdrawn public land, administered by the Bureau of Land Management (BLM) (see Map 1 and Table 1).

This WSA is contiguous with the Big Maria Mountains WSA (CDCA-321) which is within the California Desert Conservation Area. The Big Maria Mountains Southern Addition WSA is bounded on the west by the Big Maria Mountains WSA boundary. To the south, the WSA boundary is delineated by a maintained dirt road. On the eastern side, the boundary follows private land and the Colorado River Indian Reservation boundary. The northern boundary is delineated by a second maintained dirt road.

The topography of the area is relatively rugged, with deeply cut washes. Numerous finger ridges and small spires and buttes are scattered throughout the area. The vegetation is varied but is primarily composed of creosote and bur sage, with profuse palo verde and ironwood in some washes.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two different suitability recommendations were analyzed in the Yuma District Wilderness Environmental Impact Statement: no wilderness and all wilderness.

2. RECOMMENDATION AND RATIONALE ---

0	acres recommended for wilderness
1,431	BLM acres recommended for nonwilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

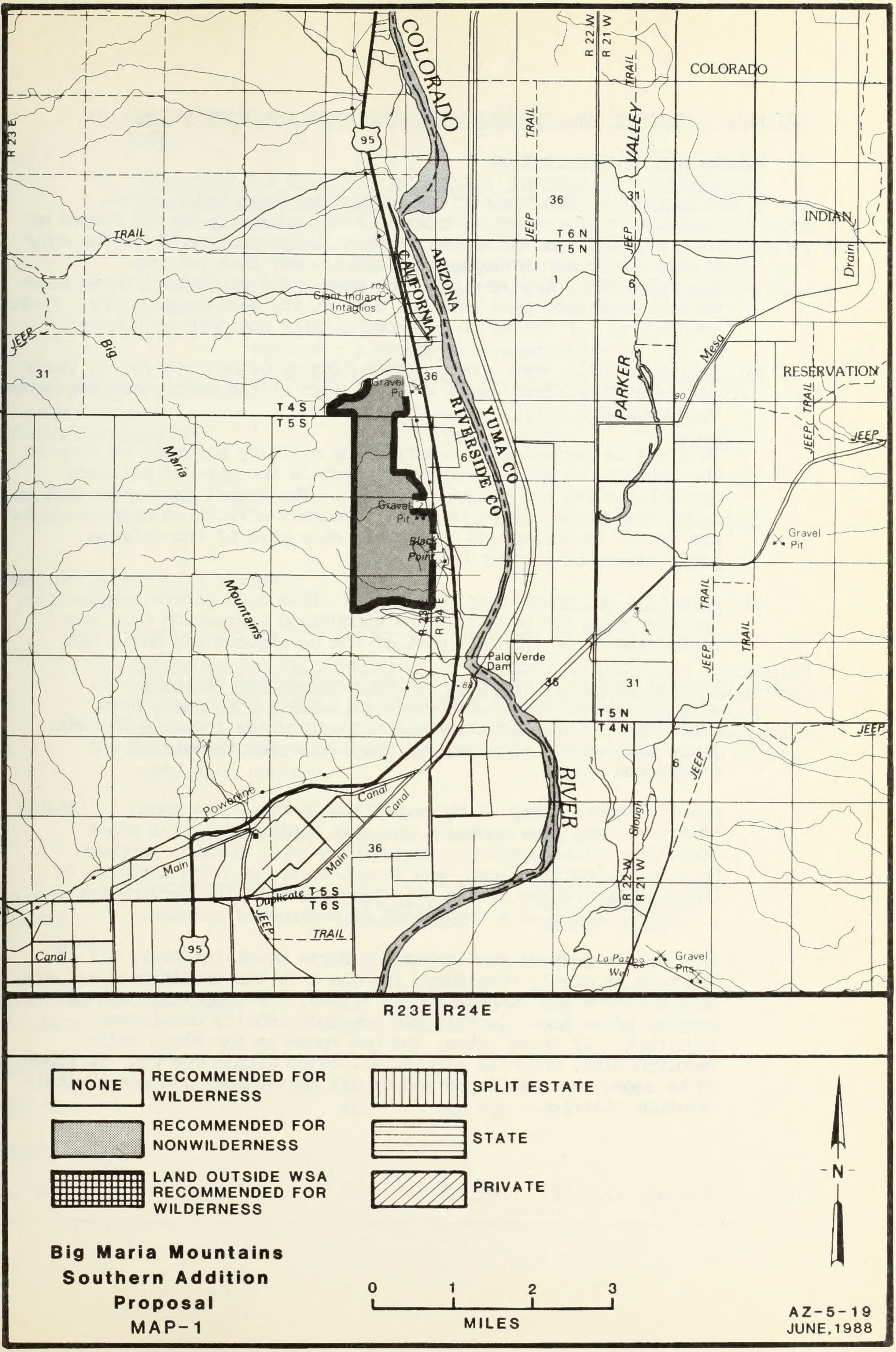
The all-wilderness recommendation is environmentally preferable as it would result in the least change from the existing natural environment over the long term.

This WSA is not recommended for wilderness designation because: (1) the contiguous Big Maria WSA is not recommended for wilderness designation, and alone, this small parcel does not contain sufficient acreage or wilderness values to stand on its own as a wilderness area. The area does not contain outstanding wilderness values when considered by itself.

The Big Maria Southern Addition WSA does not provide outstanding opportunities for solitude and primitive and unconfined types of recreation as an autonomous unit. Only when included with the larger Big Maria Mountain WSA do this WSA's wilderness values sufficiently satisfy the criteria set forth in Section 2(c) of the 1964 Wilderness Act. Consequently, on its own, the WSA fails to meet the criteria, eliminating the area from consideration as wilderness.

TABLE 1 - Land Status and Acreage Summary of the Study Area

		Acres
Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	1,431
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		1,431
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	1,431
Split Estate	(BLM surface only)	0
Total BLM Lands Not Recommended for Wilderness		1,431



Big Maria Mountains Southern Addition Proposal

MAP-1

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Big Maria Mountains Southern Addition WSA generally appears to have been affected primarily by the forces of nature with human influences substantially unnoticeable. The only evidence of human activity is a vehicle way that extends approximately one mile across the area and a network of three short vehicle ways that penetrate the area at its eastern boundary. These imprints do not appear to be substantially noticeable, however.

2. Solitude: This area offers outstanding opportunities for solitude only when considered as an integral part of the contiguous Big Maria Mountains WSA.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: This area offers outstanding opportunities for primitive and unconfined recreation only when considered as an integral part of the contiguous Big Maria WSA.

4. Special Features: Foxtail cactus (Coryphantha vivipara var. alvorsonii) and barrel cactus (Ferocactus acanthodes), both classified as BLM sensitive plant species, are found in the WSA. These species are also Federal candidates for threatened and endangered status.

   Desert bighorn sheep, a BLM sensitive species, are known to inhabit this WSA. The area contains suitable habitat for five other sensitive animal species: ferruginous hawk, merlin, northern harrier, peregrin falcon, and desert tortoise. The tortoise is under status review by the U.S. Fish and Wildlife Service for possible listing as a threatened or endangered species.

   This WSA is part of the larger Big Maria Mountains area, all of which is generally considered important to the traditional beliefs of the Mohave and Quechan Indian Tribes. In addition, each of several sites known in this WSA are individually considered important. Of these sites, the one known as the Black Point Geoglyph Site, which is partially located within the WSA, is known to be among the most important of all Native American sites within the Yuma District.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 1,431 acres of the American Desert/Palo Verde-Cactus Shrub ecosystem. The Big Maria Mountains Southern Addition WSA would not increase the diversity of the types of ecosystems represented in the NWPS. The landform represented here generally reflects that of the surrounding desert lands.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
American Desert/Palo Verde-Cactus Shrub	2	271,403	42	1,544,317
	CALIFORNIA			
American Desert/Palo Verde-Cactus Shrub	0	0	11	592,338

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of five major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of 18 BLM WSAs recommended for wilderness designation. The closest designated wilderness areas are located in Joshua Tree National Monument, located 40 miles to the west.

C. Manageability

The Big Maria Mountains Southern Addition WSA is not manageable as wilderness because it is too small and has insufficient wilderness values to stand alone. The area is bounded on the north by a vehicle way and on the south by a maintained road, both of which can easily be recognized by the public. The east and west boundaries are not as easily discernable in the field. Due to the flat terrain, potential management problems may exist in restricting vehicle travel. Additional signing or cabling may be necessary. At present, no nonconforming uses occur within the area.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

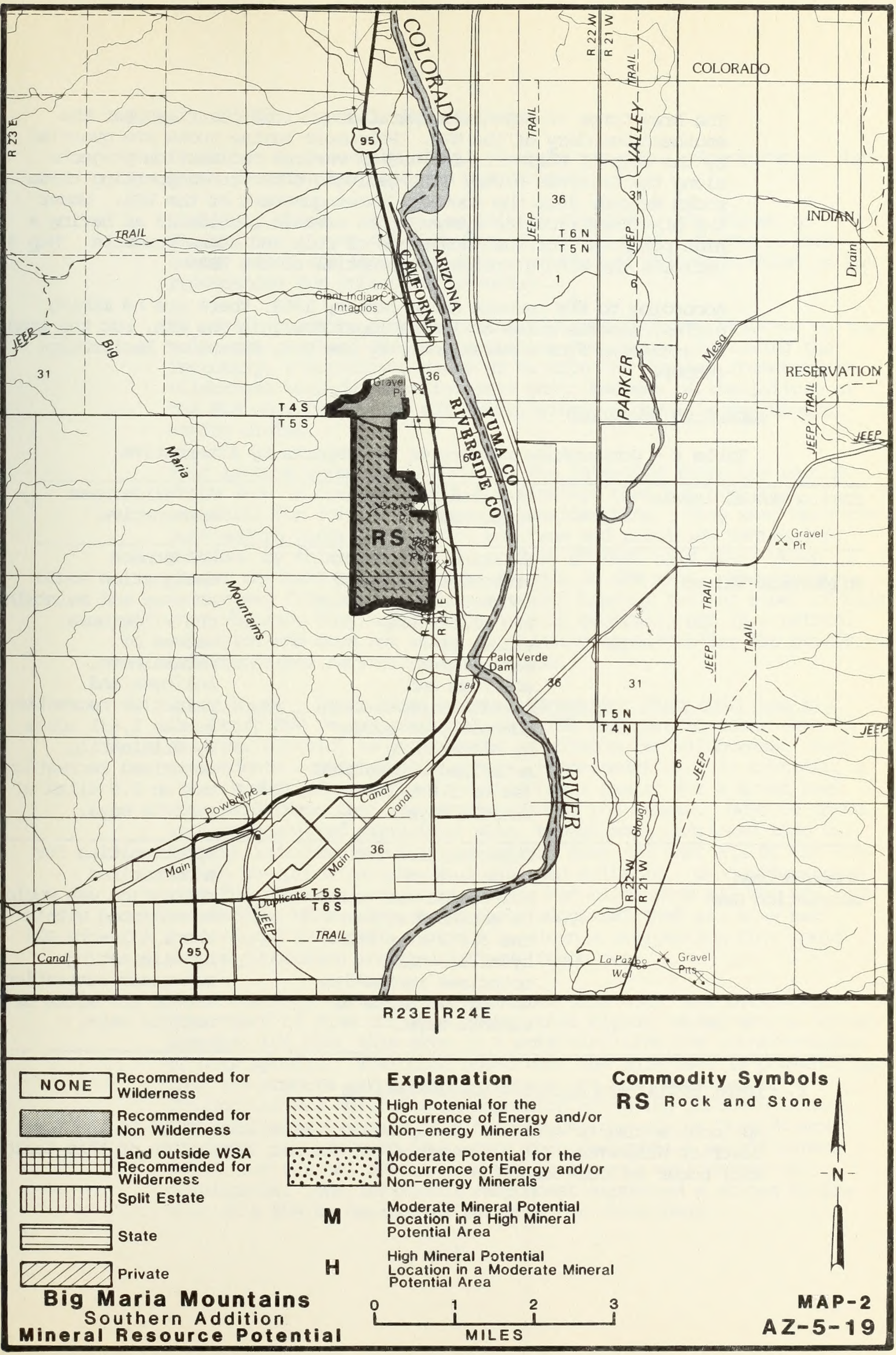
D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Big Maria Mountains Southern Addition WSA is located in the BLM Big Maria Geology-Energy-Mineral (GEM) Resource Area (GRA). The Draft Yuma District Wilderness EIS did not include an evaluation of the mineral potential of this WSA. The 1980 GRA file did not classify the WSA for mineral resource occurrence potential.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: The U.S. Bureau of Mines released a summary report of their investigation of the adjacent Big Maria Mountains WSA in Open File Report MLA-142-82 in 1982. No mineral survey was conducted for the Big Maria Mountains WSA by the U.S. Geological Survey.

   GRA file data showed that four properties in or near the southern portion of the CDCA Big Maria Mountains have low grade gold-silver-copper resources totalling more than 300,000 tons. Most of these deposits were found to be in hydrothermal quartz veins in Precambrian faulted and sheared granitic plutonic rocks. Some deposits are associated with intrusive dikes. In the adjacent Big Maria Mountains WSA, these rocks are classified in the GRA file as having a high potential for the occurrence of gold.

   These geologic conditions extend into the northern portion of the Big Maria Mountains Southern Addition WSA. However, due to the absence of physical evidence of mineralization, this portion of the WSA is considered as having a low potential for the occurrence of gold resources.


COLORADO
RIVER
ARIZONA
CALIFORNIA
YUMA CO
RIVERSIDE CO
COLORADO
INDIAN
RESERVATION
PARKER
VALLEY
TRAIL
JEEP
Mesa
Drain
95
Giant Indian Intaglios
Gravel Pit
Black Point
RS
Big
Maria
Mountains
Palo Verde Dam
Powerline
Canal
Main
Duplicate
Slough
La Paz Well
Gravel Pits
R 23 E
R 24 E
R 22 W
R 21 W
T 6 N
T 5 N
T 4 N
T4S
T5S
T6S
31
36
1
6
90
88
R23E R24E
NONE Recommended for Wilderness
Recommended for Non Wilderness
Land outside WSA Recommended for Wilderness
Split Estate
State
Private
Explanation
High Potenial for the Occurrence of Energy and/or Non-energy Minerals
Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals
M Moderate Mineral Potential Location in a High Mineral Potential Area
H High Mineral Potential Location in a Moderate Mineral Potential Area
Commodity Symbols
RS Rock and Stone
N
0 1 2 3
MILES

Big Maria Mountains
Southern Addition
Mineral Resource Potential

MAP-2
AZ-5-19

The Army Corps of Engineers operates two rock quarries near the southern boundary of the WSA. Paleozoic marine rocks are quarried by the Corp of Engineers for use in various reclamation projects along the Colorado River. The geologic structure supporting these rocks extends into the southern three-quarters of the WSA. Under the BLM classification system, this area is considered as having a high potential for the occurrence of rock and stone products. Map 2 reflects the mineral resource potential of the WSA.

According to BLM records dated January 1988, there are no mining claims, mineral sales or leases located within the WSA, but the area is withdrawn from mineral entry by the U.S. Bureau of Reclamation (USBR).

E. Impact on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action/No Wilderness	All-Wilderness Alternative
Wilderness Values	Existing management prescriptions would enhance and maintain the wilderness values of naturalness, solitude and primitive recreation across 1,431 acres by eliminating motorized recreation use on 2.5 miles of vehicle ways.	Wilderness designation would enhance and maintain the wilderness values of naturalness, solitude and primitive recreation across 1,431 acres by eliminating motorized recreation use on 2.5 miles of vehicle ways.
Nonmotorized Recreation Use	Opportunities for nonmotorized recreation use would be enhanced within the 1,431-acre WSA by eliminating motorized recreation use on 2.5 miles of vehicle ways.	Opportunities for nonmotorized recreation use would be enhanced within the 1,431-acre WSA by eliminating motorized recreation use on 2.5 miles of vehicle ways.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District Wilderness EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: During the Initial Inventory, the Bureau of Reclamation, Lower Colorado Region, stated that two of its rock quarry sites are located within a portion of this unit which is not recommended for Intensive Inventory.

   No public comments addressing the wilderness characteristics of the unit were received during the Initial Inventory. Following the inventory, a lapidary society wrote opposing further inventory or wilderness consideration for this unit, because of the failure of the BLM maps to portray all roads, mines, mineral locations and mining claims.

   Four letters were received during the Intensive Inventory period. Three were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area, which is one of the best examples of wild lands in the west. The fourth letter was from a mining company which opposes further study of this unit, because they believe the area is generally not in a natural condition and does not offer outstanding opportunities for primitive and unconfined recreation or solitude.

2. Study Phase - Draft Yuma Resource Management Plan (RMP) and EIS: The Draft RMP recommended that this WSA and several other WSAs in the Yuma District be recommended unsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness than was recommended by the Bureau. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs within the planning area be designated suitable. One writer noted that the rigorous screening process had eliminated all but the most outstanding WSAs. Two respondents suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

   Three comments specifically mentioned this WSA. The California Department of Fish and Game stated that bighorn sheep are no longer present, but that this area is a potential site for reintroduction of this species. They also noted that the mule deer is present, but that its numbers are declining because of the pressures of residential and agricultural expansion along the Colorado River. The California Division of Mines and Geology stated that mineral potential in this unit is low and that designation as wilderness would have minimal adverse impacts on mineral exploration and development. One individual respondent expressed a strong desire that this WSA be designated suitable for wilderness.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be designated unsuitable for wilderness; 1,420 acres would be returned to other resource uses. Many respondents supported the general no-wilderness position for this WSA and a number of other WSAs in the Yuma District. Their major concerns were the need for motorized vehicle access for mineral exploration, recreation, and maintenance of water facilities for wildlife. An equally large number of respondents, including the Sierra Club, favored wilderness designation for all of the WSAs within the District.

   Six comments addressed this specific WSA. The Colorado River Indian Tribes wanted wilderness here because it is needed to protect some extremely valuable cultural resources. The Yuma Chapter of the Audubon Society also favored wilderness. An individual respondent, a person representing the precious metals industry, and the Arizona Mining Association opposed wilderness for this small area because of its mineral potential.

   The California Department of Fish and Game noted the presence of burro deer in this general area and stated that it has a 14-year plan to relocate and reintroduce desert bighorn sheep back into suitable historic ranges in the Big Maria Mountains, and that BLM should recognize that this program should not be hindered by restrictions on vehicle access.

   No comments were received from local governments.

Little Picacho Peak Addition

AZ-050-035

LITTLE PICACHO PEAK ADDITION WILDERNESS STUDY AREA (WSA)

(AZ-050-035)

1. THE STUDY AREA --- 2,925 acres

The Little Picacho Peak Addition WSA is located in southeastern Imperial County, California, about 20 miles north of Yuma, Arizona. The study area contains 2,925 acres of Bureau of Land Management (BLM) land and no State or private land (see Map 1 and Table 1).

This WSA is within BLM's Yuma District, but is contiguous with California Desert District's Little Picacho Peak WSA (CDCA-356). Little Picacho Peak Addition WSA shares both its west and south boundaries with Little Picacho Peak WSA. From the northwest corner, the WSA boundary follows the California Desert District boundary south along the east edges of section 34 and sections 3 and 10, T. 14 S., R. 23 E., and then east along the north edges of sections 14 and 13 to an intersection with the Ferguson Lake Road. The boundary then follows the maintained Ferguson Lake Road in a northerly direction until it reaches the Imperial National Wildlife Refuge. The edge of the wildlife refuge and a strip of private land conforming to the west quarter of section 36, T. 13 S., R. 23 E. forms the remainder of the WSA boundary.

The WSA boundary is readily accessible by vehicle via the Imperial County-maintained Ferguson Lake Road. Infrequently graded, this road is steep and rough but marginally passable by two-wheel drive vehicles. The WSA consists of a series of rugged peaks breaking east toward the Colorado River, with elevations ranging from 200 to 912 feet. Several deep washes dissect the east-facing slopes. The peaks support a thin cover of creosote, mixed desert scrub, annual grasses, and galleta grass. Palo verde and ironwood line the washes.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Two suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EISs) for the Proposed Wilderness Program for the Yuma District: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE --- 0 acres recommended for wilderness
2,925 BLM acres recommended for nonwilderness

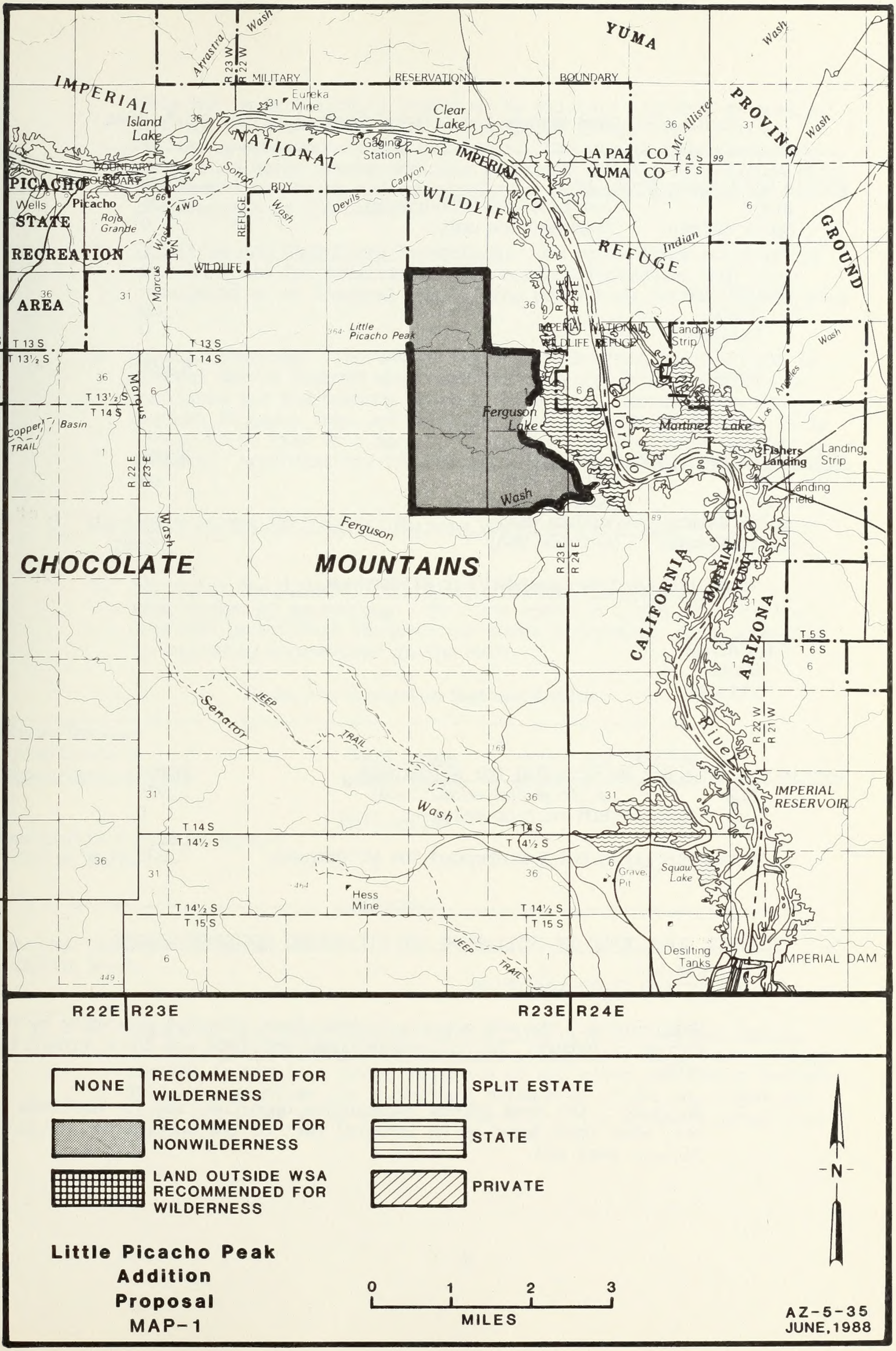
No wilderness is the recommendation for the Little Picacho Peak Addition WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

All wilderness is the environmentally preferable alternative. This is because it will result in the least change from the existing natural environment over the long term.

The no-wilderness recommendation is based on the following rationale: (1) the contiguous Little Picacho Peak WSA has also been recommended for no-wilderness, and the Little Picacho Peak Addition does not contain sufficient wilderness values to stand on its own as a wilderness area; and (2) this WSA has moderate potential for metallic minerals.

Outside sights and sounds from motorized recreation and other activities affect the wilderness values of solitude and primitive recreation on almost 80% of this WSA. The Little Picacho Peak Addition WSA has outstanding opportunities for solitude and for a primitive and unconfined type of recreation only when considered in conjunction with the contiguous Little Picacho Peak WSA. Consequently, on its own, this WSA fails to meet the criteria specified as the definition of wilderness by the Wilderness Act. No primitive routes of travel have been identified within the WSA.

The study area's mineral potential could result in the eventual further degradation of wilderness values on a significant portion of the area. If designated wilderness, the area would be withdrawn from further mineral entry. However, based on this WSA's mineral potential and the existing claims, it is projected that even under wilderness management, development of one mine would take place through exercise of valid existing rights. The mine and the activity associated with it would impair naturalness on two percent of the WSA, and solitude and opportunities for primitive recreation on 20% of the study area.



Little Picacho Peak Addition Proposal MAP-1

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	2,925
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		2,925

Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0

Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	2,925
Split Estate	(BLM surface only)	0
Total BLM Lands Not Recommended for Wilderness		2,925

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA appears to have been affected primarily by the forces of nature. No noticeable human imprints are found within the area.

2. Solitude: The area offers outstanding opportunities for solitude only when considered as an integral part of the contiguous Little Picacho Peak WSA.

This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The area offers outstanding opportunities for primitive and unconfined recreation only when considered as an integral part of the contiguous Little Picacho Peak WSA.

4. Special Features: The entire Little Picacho Peak Addition WSA is crucial desert bighorn sheep habitat. No population estimate is available for the bighorn sheep in this area. Because the WSA borders Ferguson Lake and Imperial National Wildlife Refuge, it is likely to be used as a hunting ground by nine sensitive species of raptors. Approximately 50 wild and free-roaming burros inhabit the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 2,925 acres of the American Desert/Palo Verde-Cactus Shrub ecosystem. This ecosystem is currently represented in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
American Desert/Palo Verde-Cactus Shrub	2	271,403	42	1,542,823
	CALIFORNIA			
American Desert/Palo Verde-Cactus Shrub	0	0	11	590,844

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of six major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Tucson	41	2,547,144	78	2,263,137
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: From Little Picacho Peak Addition WSA the closest designated area is Joshua Tree Wilderness at Joshua Tree National Monument, approximately 85 air miles northwest. In addition, six other BLM study areas recommended for wilderness designation are within 50 air miles, three in the California Desert District and three in Arizona's Yuma District.

C. Manageability

The Little Picacho Peak Addition WSA is manageable as wilderness. However, the expected high cost of wilderness management is projected to outweigh the benefits of adding this area to the NWPS.

The WSA contains 29 unpatented mining claims. Considering the area's mineral potential, it is probable that at least a portion of these claims would be found valid upon examination. Since development of valid claims could proceed with or without wilderness designation, it is likely that existing wilderness values could be adversely affected. BLM projections are that development of one mine would take place, causing surface disturbance to 50 acres. In addition, the sights and sounds of the mining operation and associated traffic would be visible and audible on 500 acres, reducing the opportunities for solitude. The only way to assure retention of existing wilderness values would be to purchase the valid mineral rights.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Little Picacho Addition WSA is located in the Picacho Geology-Energy-Minerals (G-E-M) Resource Area (GRA).

   BLM had not assessed the mineral potential for the area encompassed by the WSA prior to the preliminary recommendations. However, mineral resource occurrence data on file in 1980 showed that the western half of the WSA was underlain by metamorphic rocks of Precambrian age (Oricopia Schist), and by Tertiary volcanic rocks in the southwest. The eastern portion of the WSA is underlain by Tertiary siltstones, sandstones, and conglomerates. In addition, the GRA file data showed a copper prospect in the southwestern portion of the WSA at the contact between the schist and Tertiary age volcanic rocks.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Recommendation: Mineral resource data had been analyzed in the Draft Yuma District Wilderness Impact Statement (August, 1987). The Mineral Resources section (Affected Environment, page 147) of the EIS stated that there are no known mineral deposits in the WSA, and no strategic or critical mineral resources are reported in the WSA. However, the EIS did indicate that the WSA is west of an area of historical mineral production, and that there is silver, gold, lead, and copper in the adjacent Little Picacho WSA. The EIS noted that the active Picacho gold mine is six miles west from the WSA.

   The EIS indicated that the WSA's environment is moderately favorable for the occurrence of metallic minerals. The EIS indicated that if the WSA were returned to multiple use, the potential for the development of two small mines is possible (total surface disturbance would be approximately 100 acres). As of December, 1986, there were 24 lode mining claims located within the WSA.

   In Geology and Mineral Resources of Imperial County, California (Morton, Paul K., 1977, California Division of Mines and Geology (CDMG), County Report 7), the CDMG showed that the Golden Dream Mine, located two and one-half miles north of the WSA, produced gold from northeast striking veins from rocks of the Oricopia Schist. In addition, the CDMG report shows that gold, silver, and lead were produced from the Mayflower Mine, located one and one-half miles north of the WSA, in rocks of the Oricopia Schist. The Mayflower Mine ore averaged 0.036 ounces per ton gold, and 0.30 ounces per ton silver in northwest striking veins. Production from these mines was not reported in the literature. Based on favorable geologic environments, known mineral occurrences, and mineral interest, the area shown on Map 2 in the western portion of the WSA underlain by the Oricopia Schist, and areas adjacent to Tertiary age volcanic

Table 3
Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	 acres	Other BLM Studies areas	 acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814
Arizona				
Phoenix	40	1,758,456	118	4,449,908
Tucson	41	2,547,144	78	2,263,137
Nevada				
Las Vegas	46	3,507,293	311	11,186,463

3. Balancing the geographic distribution of wilderness areas: From Little Picacho Peak Addition WSA the closest designated area is Joshua Tree Wilderness at Joshua Tree National Monument, approximately 85 air miles northwest. In addition, six other BLM study areas recommended for wilderness designation are within 50 air miles, three in the California Desert District and three in Arizona's Yuma District.

C. Manageability

The Little Picacho Peak Addition WSA is manageable as wilderness. However, the expected high cost of wilderness management is projected to outweigh the benefits of adding this area to the NWPS.

The WSA contains 29 unpatented mining claims. Considering the area's mineral potential, it is probable that at least a portion of these claims would be found valid upon examination. Since development of valid claims could proceed with or without wilderness designation, it is likely that existing wilderness values could be adversely affected. BLM projections are that development of one mine would take place, causing surface disturbance to 50 acres. In addition, the sights and sounds of the mining operation and associated traffic would be visible and audible on 500 acres, reducing the opportunities for solitude. The only way to assure retention of existing wilderness values would be to purchase the valid mineral rights.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Little Picacho Addition WSA is located in the Picacho Geology-Energy-Minerals (G-E-M) Resource Area (GRA).

   BLM had not assessed the mineral potential for the area encompassed by the WSA prior to the preliminary recommendations. However, mineral resource occurrence data on file in 1980 showed that the western half of the WSA was underlain by metamorphic rocks of Precambrian age (Oricopia Schist), and by Tertiary volcanic rocks in the southwest. The eastern portion of the WSA is underlain by Tertiary siltstones, sandstones, and conglomerates. In addition, the GRA file data showed a copper prospect in the southwestern portion of the WSA at the contact between the schist and Tertiary age volcanic rocks.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Recommendation: Mineral resource data had been analyzed in the Draft Yuma District Wilderness Impact Statement (August, 1987). The Mineral Resources section (Affected Environment, page 147) of the EIS stated that there are no known mineral deposits in the WSA, and no strategic or critical mineral resources are reported in the WSA. However, the EIS did indicate that the WSA is west of an area of historical mineral production, and that there is silver, gold, lead, and copper in the adjacent Little Picacho WSA. The EIS noted that the active Picacho gold mine is six miles west from the WSA.

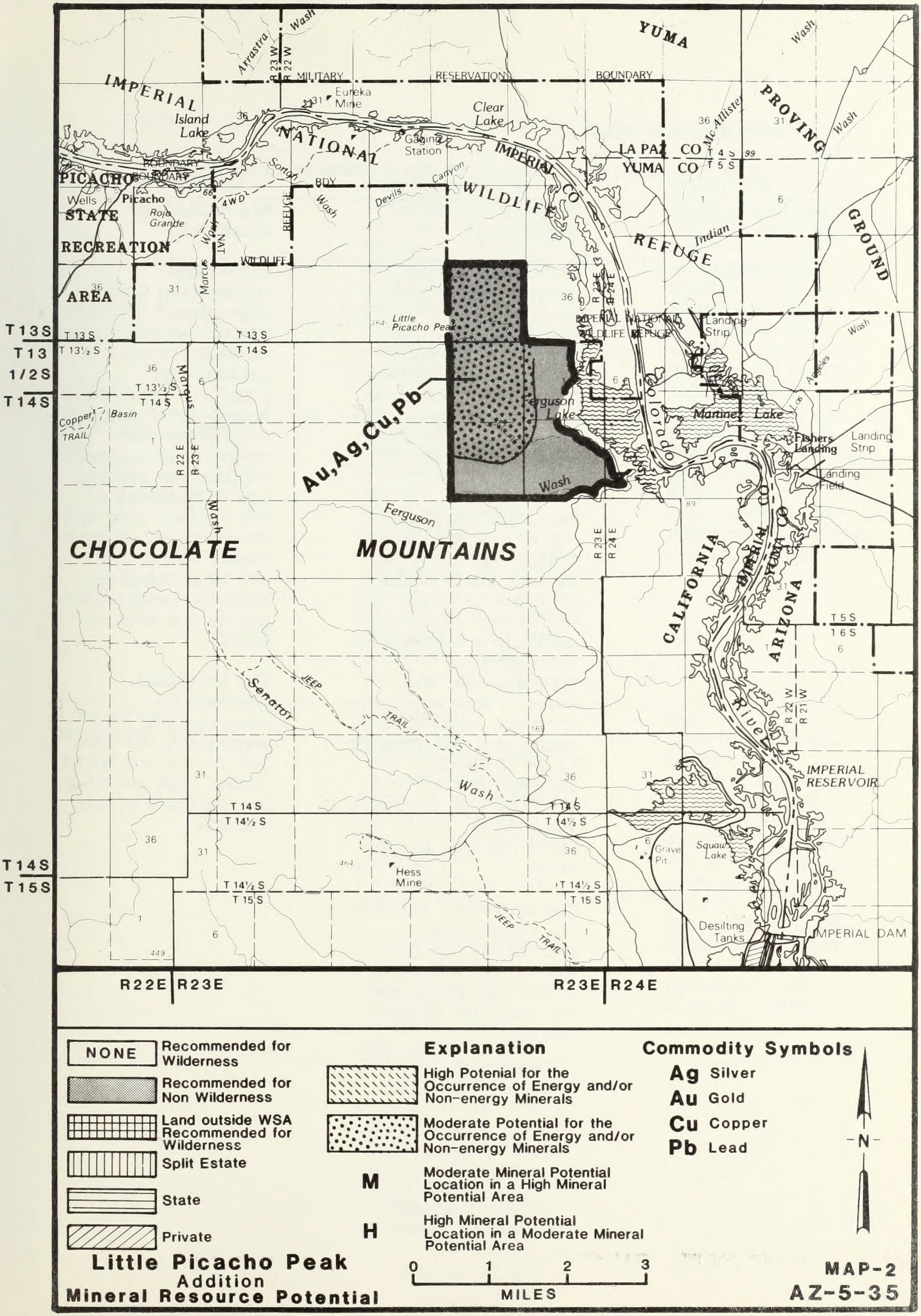
   The EIS indicated that the WSA's environment is moderately favorable for the occurrence of metallic minerals. The EIS indicated that if the WSA were returned to multiple use, the potential for the development of two small mines is possible (total surface disturbance would be approximately 100 acres). As of December, 1986, there were 24 lode mining claims located within the WSA.

   In Geology and Mineral Resources of Imperial County, California (Morton, Paul K., 1977, California Division of Mines and Geology (CDMG), County Report 7), the CDMG showed that the Golden Dream Mine, located two and one-half miles north of the WSA, produced gold from northeast striking veins from rocks of the Oricopia Schist. In addition, the CDMG report shows that gold, silver, and lead were produced from the Mayflower Mine, located one and one-half miles north of the WSA, in rocks of the Oricopia Schist. The Mayflower Mine ore averaged 0.036 ounces per ton gold, and 0.30 ounces per ton silver in northwest striking veins. Production from these mines was not reported in the literature. Based on favorable geologic environments, known mineral occurrences, and mineral interest, the area shown on Map 2 in the western portion of the WSA underlain by the Oricopia Schist, and areas adjacent to Tertiary age volcanic rocks are considered as having a moderate potential for the occurrence of gold, silver, copper, and lead under the BLM mineral classification system.

As of January 1988, no mineral sales or leases had been issued within the WSA. Portions of the eastern and southeastern areas of the WSA, aggregating 70 acres, have been withdrawn from mineral location and entry by a reclamation withdrawal, managed by the U.S. Bureau of Reclamation (Secretarial Order dated 8-1-1903). Unpatented lode mining claims are located along the western and southern portions of the WSA. Mining claims located in the WSA are indicated by the following data obtained from BLM records dated January, 1988.

Table 4 - Mining Claims

TYPE	NUMBER			ACRES		
MINING CLAIM	SUITABLE	NONSUIT.	TOTAL	SUITABLE	NONSUIT.	TOTAL
Lode	N/A	29	29	N/A	580	580
Placer	N/A	0	0	N/A	0	0
Mill Site	N/A	0	0	N/A	0	0
Total	N/A	29	29	N/A	580	580



Little Picacho Peak
Addition
Mineral Resource Potential

MAP-2
AZ-5-35

E. Impacts on Resources

Table 5 - Comparative Summary of the Impacts by Alternative

Environmental Issues	Proposed Action/No Wilderness	All-Wilderness Alternative
Wilderness Values	One comprehensive mineral exploration program and the development of one surface mine would impair the wilderness values of naturalness, solitude and primitive recreation on a total of approximately 500 acres. Motorized recreation use on one mile of trails and 1.5 miles of mine roads would continue to impair the wilderness values of solitude and primitive recreation on approximately 520 acres. The projected increase in motorized recreation use from 10 to 20 VDY would further impair solitude and primitive recreation opportunities in this area. The projected increase in nonmotorized recreation use from 190 to 380 VDY would reduce opportunities for solitude within the WSA.	Wilderness designation would enhance and maintain the wilderness values of naturalness, solitude and primitive recreation across 2,925 acres by precluding one comprehensive mineral exploration program, the development of one surface mine and construction of three runoff structures, and by eliminating motorized recreation use on one mile of trails. The projected increase in nonmotorized recreation use from 200 to 400 VDY would reduce opportunities for solitude within the WSA.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

Mineral Development	Potential mineral resources on lands that are not under Bureau of Reclamation withdrawal in the WSA would be fully evaluated in one mineral exploration program and developed at one projected mine.	Withdrawal of 2,925 acres of public land would prevent the evaluation and development of mineral resources within the WSA by curtailing one mineral exploration program and denying one projected mine.
Motorized Recreation Use	An estimated increase in motorized recreation use 6 to 120 VDY from 10 VDY would not affect opportunities for motorized recreation use on the one mile of trails and 1.5 miles of mine road in the WSA, except for some impairment during heavy use periods.	Closing one mile of trails to motorized recreation use would eliminate all opportunities for motorized recreation use in the WSA.
Nonmotorized Recreation Use	Nonmotorized recreation opportunities would be lessened across a total of approximately 500 acres by one mineral exploration program and the development of one surface mine. Opportunities for nonmotorized recreation use would continue to be impaired across approximately 520 acres by motorized recreation use on one mile of trails and 1.5 miles of mine roads. These opportunities would be further impaired by a 1,100 percent increase in motorized recreation	use. Opportunities for nonmotorized recreation use would by enhanced and maintained on all 2,925 acres of the WSA by precluding one mineral exploration program and the development of one surface mine, and by eliminating motorized recreation use on one mile of trails.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

Cultural Resources	One potentially eligible National Register site could be adversely impacted by casual disturbance, vandalism and site destruction resulting from increased visitation by recreation users and surface disturbances resulting from mineral exploration and the development of one mine.	Wilderness designation would help prevent vandalism, casual disturbance and site destruction at one potentially eligible National Register site by closing one mile of trails to motorized recreation use, and by precluding one mineral exploration program and the development of one surface mine within the WSA. Increased visitation by nonmotorized recreation users could result in isolated incidents of casual disturbance, vandalism or site destruction.
Crucial Wildlife Habitat	Surface disturbances from one mineral exploration program and the development of one surface mine would result in the loss of 52 acres of crucial bighorn sheet habitat. Continued motorized recreation use on 1.5 miles of mine roads would preclude rehabilitation 1.8 acres of surface disturbance in crucial bighorn sheep habitat.	Wilderness designation would prevent the close of approximately 52 acres of crucial bighorn sheep habitat by precluding two acres of surface disturbance from one mineral exploration program and 50 acres of surface disturbance from the development of one surface mine.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

Special Status Wildlife Species	Surface disturbances from one mineral exploration program and the development of one surface mine would result in the loss of approximately 52 acres of potential habitat for the peregrine falcon within the WSA. Motorized recreation use on one mile of trails and 1.5 miles of mine roads would continue to disturb potential peregrine falcon nest sites.	Wilderness designation would prevent the loss of approximately 52 acres of potential habitat for the peregrine falcon by precluding surface disturbances from one mineral exploration program and the development of one surface mine. It would also prevent disturbances to peregrine falcon nest sites by closing one mile of trails to motorized recreation use.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Yuma District FEIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

The following is a summary of all comments received. Known inaccuracies are noted in parentheses.

1. Inventory Phase: No public comments addressing the wilderness characteristics of the unit were received during the Initial Inventory. Following the inventory, a lapidary society wrote opposing further inventory or wilderness consideration for this unit, because of the failure of the BLM maps to portray all roads, mines, mineral locations and mining claims.

   Six letters were received during the Intensive Inventory period. Five were in agreement with the findings that the area has potential for further wilderness consideration. They mentioned the outstanding opportunities for solitude and primitive recreation provided by this unit and the need to protect this area, which is one of the best examples of wild lands in the west. Also noted was the scientific and educational value of this area, since it is an important nesting place for waterfowl along the Colorado River migration route. The sixth respondent was the County of Imperial Board of Supervisors, which stated that it had protested the adjoining wilderness in the California Desert Conservation Area, since wilderness was not consistent with the county's general plan.

2. Study Phase: Draft Yuma Resource Management Plan (RMP) and EIS. The Draft RMP recommended that this WSA, along with several other WSAs, be recommended unsuitable for wilderness. Many respondents supported this general recommendation. In contrast, a large number of respondents stated their desire for a great deal more wilderness than was recommended by the Bureau. Most of these letters specified particular WSAs, though none mentioned this WSA. Several individuals and organizations proposed that all of the WSAs within the planning area be recommended suitable. One writer noted that the rigorous screening process had eliminated all but the most outstanding WSAs. Two respondents suggested that all WSAs not recommended as suitable should be given a designation that would assure protection for their unique resources.

   Only four comments were specific to this WSA. The Yuma Audubon Society disagreed with all of the Bureau's reasons for rejecting this WSA and proposed that it be designated wilderness if the adjacent Little Picacho Peak WSA in the California Desert Conservation Area is designated wilderness by Congress. They objected to BLM's use of "mineral conflicts" as a reason for rejecting this WSA, declaring that the potential for minerals, oil, gas, and geothermal energy were low, and, furthermore, that the area was already under mineral withdrawal by the Bureau of Reclamation. The Society described the WSA's high wilderness value, along with its neighboring area in the California Desert Conservation Area. It is rugged and would provide outstanding solitude and opportunity for primitive recreation. It is also habitat for a rare cactus and the bighorn sheep and has considerable cultural resources potential.

   The California Department of Fish and Game mentioned that "burro deer" are found in this unit. The California Division of Mines and Geology stated that the area has potential for uranium. One respondent requested that this particular WSA be recommended as suitable for wilderness.

3. Draft EIS on Proposed Wilderness Program for Yuma District: The Proposed Wilderness Program continued the earlier recommendation of the Resource Management Plan (RMP) that this WSA be recommended unsuitable for wilderness; 2,915 acres would be returned to other resource uses. Many respondents supported the general "no-wilderness" position for this WSA and for a number of other WSAs in the Yuma District. Their major concerns were the need for motorized vehicle access for mineral exploration, recreation, and maintenance of water facilities for wildlife. An equally large number of respondents, including the Sierra Club, favored wilderness designation for all of the WSAs within the District.

   Five comments specifically addressed this WSA. The California Department of Parks and Recreation recommended designating all of this area as wilderness; this would be in agreement with the Picacho State Recreation Area. The Department identified intensive potential adverse impacts to wildlife (Nelson bighorn, raptors, foxtail cactus) under the BLM's recommendation. They also stated that there are no critical minerals in the area to justify mining activities.

The Yuma Audubon Society strongly advocated wilderness for this unit. They noted that it is adjacent to 2,490 acres of administratively endorsed wilderness in the Imperial National Wildlife Refuge. Together, the two areas would exceed 5,000 acres. Wilderness status for each of these units would be mutually beneficial. The Society stated that the Bureau failed to present an adequate rationale for rejecting this area for wilderness designation. No other resource use, such as motorized recreation or mining, was of significant importance in this area. One individual respondent also favored wilderness for this area.

The Arizona Mining Association and a representative of the precious metals industry opposed wilderness for this area because of its mineral potential.

No comments were received from local governments.

Agua Tibia

CA-060-002

Agua Tibia

CA-060-002

AGUA TIBIA WILDERNESS STUDY AREA (WSA)

(CA-060-002)

1. THE STUDY AREA ---	344 acres

The Agua Tibia WSA is located in southwestern Riverside County, ten miles west of Temecula, California. The WSA includes 344 acres of public land administered by the Bureau of Land Management (BLM). There are no private or State lands within the WSA's boundaries (see Map 1 and Table 1).

The WSA is located adjacent to the Agua Tibia Wilderness Area, a U.S. Forest Service (USFS) wilderness area, administered by the Cleveland National Forest. The WSA is bounded on the north, east and west by private land. The southern boundary is contiguous with the Agua Tibia Wilderness Area.

The WSA consists of an east-west trending ridge just north of the steep Agua Tibia Wilderness. As a small part of the Agua Tibia Mountain portion of the Peninsular Range geomorphic province, elevations in this area range from 1,700 feet in the northwest to a maximum of 2,581 feet. Dominant features include Pechanga Creek which traverses through the southwest corner of the WSA, and a steep break along the northern boundary overlooking the Pauba Valley.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). The WSA is within BLM's Escondido-Border Planning Unit, for which a management framework plan was completed in 1976. Two different suitability recommendations were analyzed in the Western Counties Wilderness Study Project Final Environmental Impact Statement (EIS), completed in 1987: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE ---	344	acres recommended for wilderness
	0	BLM acres recommended for nonwilderness

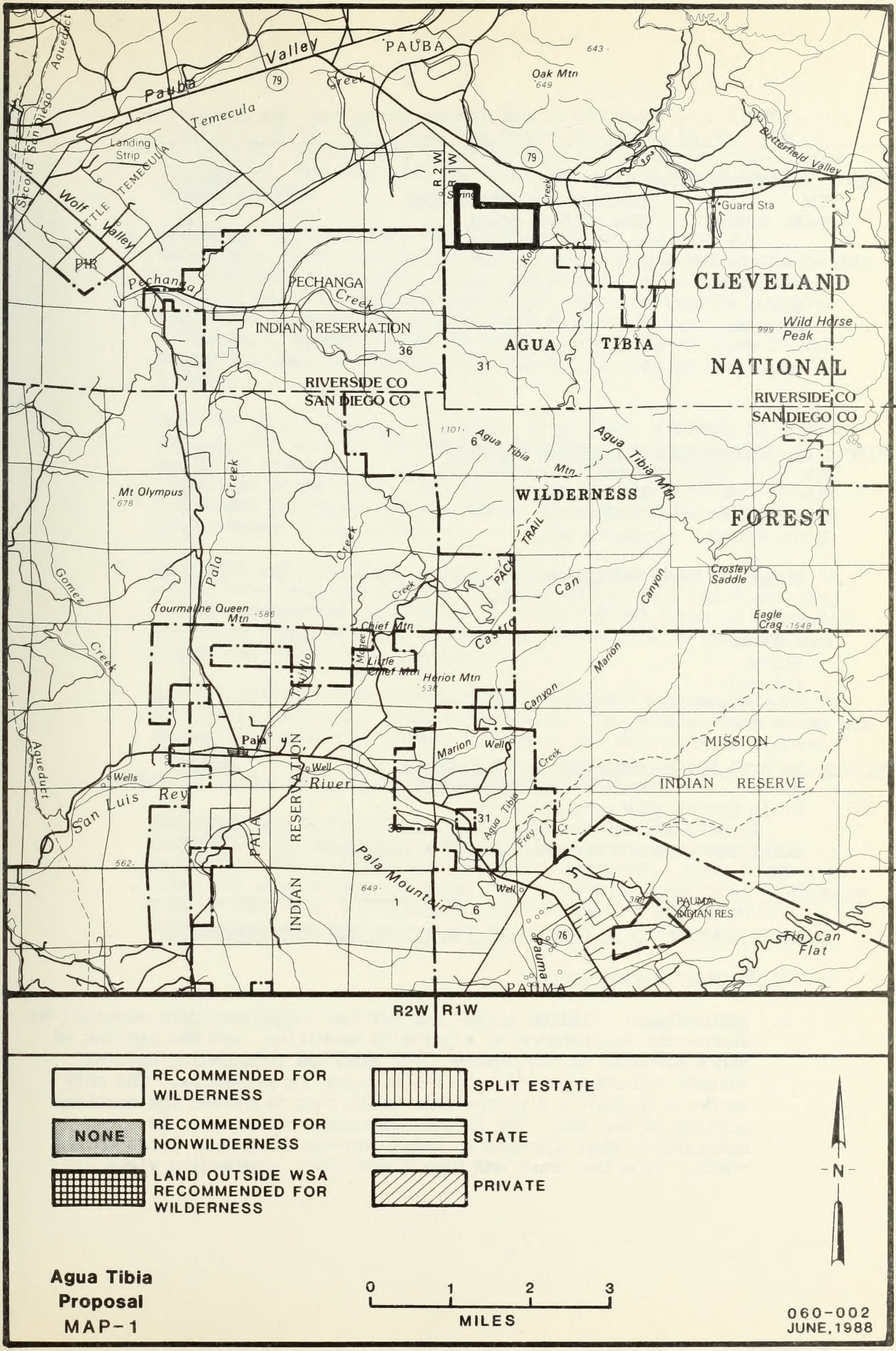
All wilderness is the recommendation for this WSA. This is considered to be environmentally preferable as it will result in the least change from the existing natural environment over the long term.

This WSA is recommended for wilderness designation because: (1) the area is in a nearly undisturbed natural state and possesses outstanding wilderness values; (2) it is a logical extension of the USFS's existing wilderness area, the Agua Tibia Wilderness; (3) designation will not adversely affect any existing resources or uses within the wilderness area; and (4) no significant conflicts with other resource uses will result from designation.

The area's wilderness values of naturalness, opportunities for solitude and primitive and unconfined types of recreation, are outstanding. Rugged terrain and limited access have maintained the area's pristine character. Within the WSA's boundaries, a sense of solitude is easily achieved. Dense vegetation, topographic relief and few visitors ensure opportunities for seclusion. When evaluated in combination with the adjacent existing wilderness areas, the WSA contains outstanding opportunities for primitive and unconfined types of recreation. Hiking and backpacking opportunities abound. The area contains representations of two native California plant communities. No routes of travel have been identified within the WSA.

The area is located adjacent to the northern border of the Agua Tibia Wilderness Area, administered by the Cleveland National Forest. This proximity enhances the WSA's values.

Current uses within this WSA consist of day hiking, picnicking, nature study, and to a lesser extent, hiking and backpacking at levels of less than 1000 visitor use days per year. These uses are consistent with those allowed under the proposed action. Designation will not affect these activities. In addition, designation of this WSA as wilderness would not result in any conflicts with other resources or uses. This WSA lacks any mineral potential. There is no access for motorized vehicles within this area.



Agua Tibia Proposal
MAP-1

060-002
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	344
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		344

Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	344
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		344
Inholdings		
State		0
Private		0

Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	0
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		0

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: Limited access and extreme ruggedness have combined to ensure the maintenance of a pristine condition, and the imprint of man's presence is negligible. The area has outstanding natural values, and does not contain roads, ways, or prospects. The only evidence of man is a narrow foot trail that traverses the northern portion of the WSA. The natural character of the unit is outstanding when compared to nonwilderness study area lands to the north. From the crest and high elevations, outstanding views are

available of all major mountain ranges and peaks in southern California. Exceptional views of the San Bernardino, San Jacinto, San Gabriel, and Santa Ana Mountains are all available to recreationists.

2. Solitude: Opportunities for solitude within the area are excellent. Dense vegetation on the steep slopes and in the canyons combined with topographic relief and relatively low use levels ensure a sense of solitude throughout. This feeling is enhanced toward the south as one approaches the existing Agua Tibia Wilderness. Opportunities for solitude are reduced close to the northern border of the WSA, near which a cluster of homes is located.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Although the site itself is small, when combined with the adjacent wilderness, the total area offers outstanding opportunities for unconfined types of recreation. The steep topography and untrammeled nature provide challenging hiking and backpacking experiences.

4. Special Features: The area provides excellent representations of two native California plant communities. The coastal sage scrub and chaparral communities present contain great diversity of species.

B. Diversity in the National Wilderness Preservation System

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 344 acres of the California Chaparral/Coastal Sagebrush ecosystem. This study area joins and complements the existing 15,934-acre Agua Tibia Wilderness area to the south and offers a higher elevation extension of undisturbed chaparral.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
California Chaparral/Coastal Sagebrush	2	49,849	1	5,002
	CALIFORNIA			
California Chaparral/Coastal Sagebrush	2	49,849	1	5,002

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of eight major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers California	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Bakersfield	32	4,071,358	128	3,998,548
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Santa Barbara-Santa Maria-Lompoc	20	1,166,142	35	528,590
San Diego	15	1,043,680	100	3,378,814
Visalia-Tulare-Porterville	34	4,431,635	61	1,681,921

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of four BLM WSAs recommended for wilderness designation. Agua Tibia WSA is adjacent to the Agua Tibia Wilderness Area, administered by the USFS. Also within a 50 mile radius are the following designated wilderness areas: Santa Rosa, San Jacinto, and San Gorgonio Wilderness Areas, administered by the San Bernardino National Forest; San Mateo Canyon Wilderness Area, administered by Cleveland National Forest; and Mount San Jacinto and Anza Borrego Desert State Wilderness Areas.

C. Manageability

The Agua Tibia WSA is manageable as wilderness. There are no conflicts which would preclude management of this area as wilderness.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Agua Tibia WSA was not inventoried for mineral resources under the BLM Geology-Energy-Mineral assessment process. Mineral resources were addressed, however, in the 1987 Final EIS for the Western Counties Wilderness Study Project. The EIS indicated no mineral resource potential for the WSA. A mineral survey of the USFS's Agua Tibia Wilderness Area, adjacent to the BLM WSA, was made by the U.S. Bureau of Mines (BOM) and U.S. Geological Survey (USGS). The findings of these surveys were published in the BOM in Open File Report (OFR) 11-85, and the USGS in USGS Bulletin 1319-A. Neither the BOM nor the USGS reports identified any potential for the occurrence of mineral resources within the USFS area.

   Geologic conditions in the BLM WSA are the same that underlie the USFS wilderness area. The geology of the WSA was mapped as being an isolated block of intrusive gabbroic rock in high angle normal fault contact with adjoining Pleistocene nonmarine deposits on the west, north and east, and inferred contact with the granitic rocks to the south (Mann, J.F., Jr., 1955, Geology of a Portion of the Elsinore Fault Zone, California, California Div. of Mines Spec. Rpt. 43, 22p.). Geologic conditions in the WSA do not appear to support the occurrence of mineral resource potential.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: Due to the low potential no mineral resource potential map was prepared. As of December 1987, there were no unpatented mining claims, mineral sales or leases recorded with BLM in this WSA.

E. Impacts on Resources

Table 4
Comparative Summary of the Impacts by Alternative

Issue Topics	All-Wilderness Alternative	No-Wilderness Alternative
Impact on Wilderness Values	The net effect of the management actions would be the retention and long-term protection of the area's wilderness values resulting primarily from the continued closure of the area to ORV use. In addition, long-term security for unanticipated adverse future actions would be provided. Naturalness and solitude would be reduced by trail maintenance and increased visitor use on less than one percent of the WSA. The special features (scenic views and two native California plant communities) and opportunities for primitive and unconfined recreation would not be impacted more than negligibly.	Impacts under the No-Wilderness/No-Action Alternative would be essentially the same as those under the Proposed Action, except that there would not be long-term security from unanticipated future actions and there would be temporary (two to four years) negative impacts to naturalness and opportunities for primitive and unconfined recreation from the proposed prescribed burning on 100 acres every ten years. The prescribed burning would have temporary minor benefits to scenic views and moderate benefit to the coastal scrub and chaparral communities, which are fire dependent.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the CDCA Plan and EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: Most comments agreed with BLM's findings.

2. Draft Environmental Impact Statement: The Bureau's recommendation was that the Agua Tibia WSA be designated as suitable for wilderness. Of the seventeen letters commenting on the Agua Tibia WSA, fourteen favored and three opposed wilderness designation.

   Wilderness proponents noted that features which would benefit from wilderness designation included the State-listed endangered Least Bell's vireo (no suitable habitat for this species in the WSA), the natural ecosystem, and solitude for nonmotorized recreationists. A few respondents wanted this small area transferred to the USFS to be managed as wilderness.

   The California Department of Forestry noted that wilderness status affects fire defense and suppression. However, they had little concern about this particular WSA, since its fire protection would fall upon the USFS, which manages the adjacent wilderness area to the north. Two organizations opposed wilderness for this area because of its potential for mineral and geothermal resources. They wanted the area to be left open for exploration and development.

3. Supplemental Draft Environmental Impact Statement: The Bureau's recommendation was the same as in the DEIS. All 344 acres were recommended as suitable. Forty-two responses were received, 28 from individuals, 11 from organizations, and the rest from local or Federal agencies or businesses. The Bureau's recommendation was supported by all but one of the respondents. The San Diego Association of Governments opposed wilderness because it would limit the use of certain fire prevention techniques.

   Reasons for favoring wilderness designation included the following: (1) it would provide the best protection for endangered plants and animals (none found within this WSA); (2) successful wilderness management is compatible with effective fire prevention and protection; and (3) this area should be added to the adjacent USFS wilderness.

Beauty Mountain

CA-060-020G

BEAUTY MOUNTAIN WILDERNESS STUDY AREA (WSA)

(CA-060-020G)

1. THE STUDY AREA --- 12,732 acres

The Beauty Mountain WSA is located across the boundary of Riverside and San Diego Counties. Temecula, California, situated approximately 30 miles west of the WSA is the closest community. The WSA includes 11,364 acres of BLM lands and 1,368 private inholdings totalling 12,732 acres (see Map 1 and Table 1).

The WSA boundaries on the north, west and south are extremely irregular, delineated by surrounding private land. The eastern boundary follows the alignment of the California Riding and Hiking Trail, which in this area serves as the temporary route of the Pacific Crest National Scenic Trail.

The Beauty Mountain WSA is comprised of a series of steep, rugged mountainsides dominated by Beauty Mountain and Iron Springs Mountain. These mountains rise above the more gentle relief of the plateau that forms the western half of the WSA. Deep canyons have formed from drainage off the erosion-resistant ridges. Elevations range from 2,920 feet near Culp Valley in the northwest to 5,548 feet at Beauty Mountain in the east.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various suitability recommendations were analyzed in the Draft, Supplemental Draft, and Final Environmental Impact Statements (EIS) for the Western Counties Wilderness Study Project. Three different suitability recommendations were analyzed in the FEIS: no wilderness, all wilderness and partial wilderness recommending roughly 55% of the WSA suitable for wilderness designation.

2. RECOMMENDATION AND RATIONALE ---

0	acres recommended for wilderness
11,364	BLM acres recommended for nonwilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The rationale for this nonsuitable recommendation are as follows: (1) the wilderness values for most of the area are not outstanding; (2) the current use levels have had no detrimental effect on the wilderness values the area possesses; (3) off-highway vehicle (OHV) use levels, restricted by the area's lack of public motorized access, will not increase enough to significantly affect these values; (4) current management has proven effective in maintaining the area's existing resources; and (5) no significant conflicts have been identified.

The All-Wilderness recommendation is environmentally preferable as it would result in the least change from the existing natural environment over the long term.

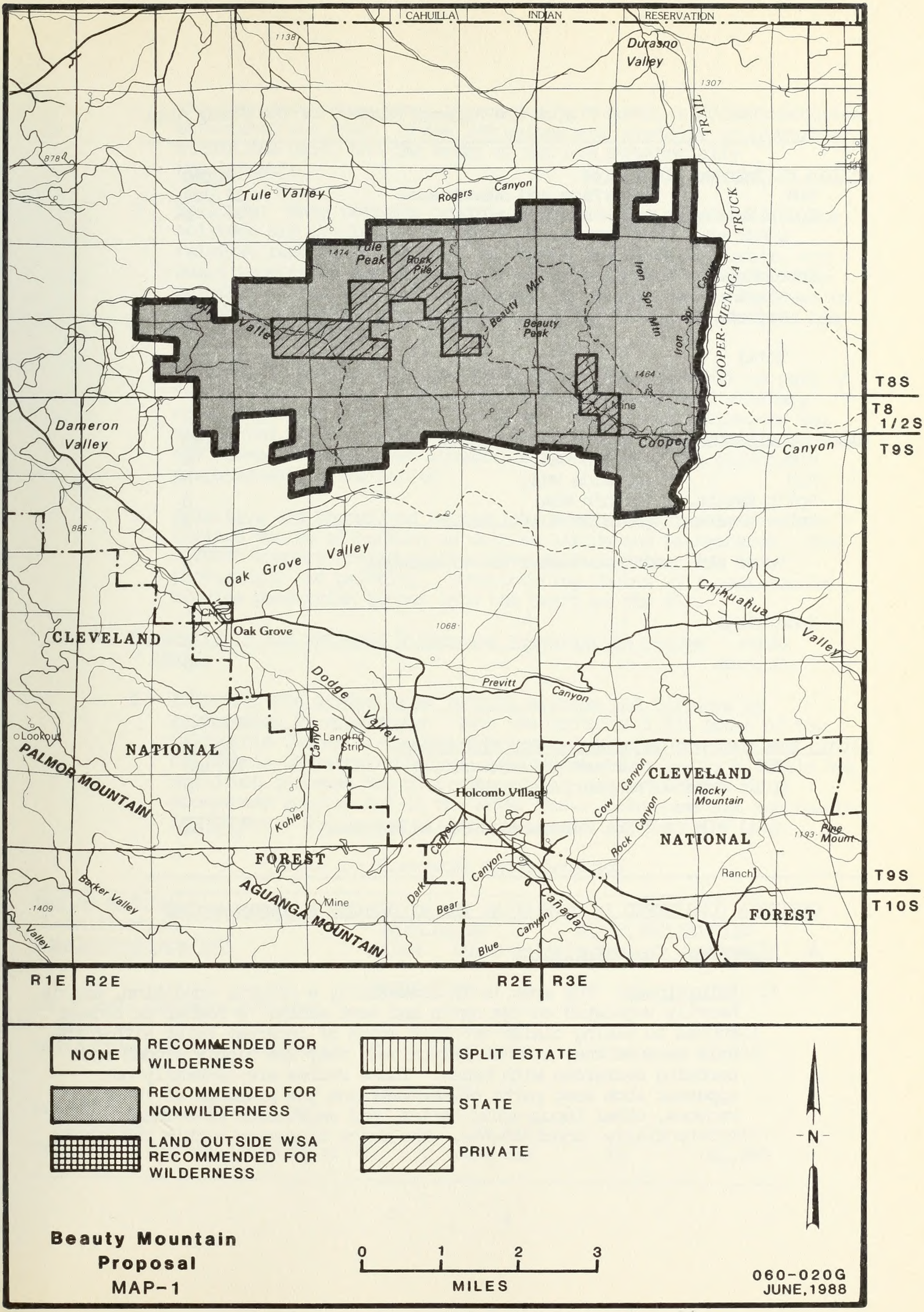
The wilderness values of this WSA, while sufficient to meet the Section 2(c) criteria of the 1964 Wilderness Act, are less than outstanding. Within this WSA, naturalness has been reduced by the development of private inholdings, specifically the facilities at the Pawnee Mine. Access routes, ancillary to the mine and other private interests, lace the WSA. Although opportunities for solitude and for primitive and unconfined types of recreation exist within this WSA, these opportunities are not fully realized because of the restricted public access. There are approximately 13 miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use.

Current uses of the area have little effect on the area's wilderness values. Most of the current recreational uses of the WSA center around the California Riding and Hiking Trail corridor. This use consists of hiking, backpacking and trail riding. Approximately 200 visitor use days (VUD) of deer and upland game hunting per year occur in this WSA. Most hunting use originates from the deer camps, located on private lands adjacent to the WSA. Hunting pressure within the WSA would be much greater if not for the lack of public access. Mining and grazing make up the remaining current uses of this WSA. Most mining activity consists of casual prospecting and recreational rockhounding. As for grazing, most of the WSA is covered by one of three allotments in the area. Livestock utilization of each of the three allotments is about 150 animal unit months (AUM). Existing range improvements are limited to fences across a portion of the area. This limited use has had little impact on the area's marginal wilderness values.

OHV use, is severely limited. The potential for high quality motorized recreational opportunities exists, but is unrealized due to the availability of similar opportunities elsewhere, and the absence of public access. Approximately 23 miles of vehicle routes exist within the interior of the WSA. All but 3.6 miles of this road network is overgrown and shows little evidence of recent OHV use.

The management framework plan prepared for this area, contains management guidelines which adequately protect and preserve the area's wilderness values. The actions outlined in the plan address limiting vehicle use; using prescribed burning to improve wildlife and livestock browse and increase the vigor of the existing vegetation, much of which is fire-dependent; developing wildlife water sources; and providing for new range improvements.

No significant conflicts with this recommendation have been identified. Current plans call for the construction of several new range developments on the Beauty Mountain allotment, including two water developments and one mile of fence. A prescribed burn of 1,000 acres is also planned in the allotment for a projected increase of 30 percent in forage allocation. These planned actions are consistent with the proposed action.



Beauty Mountain Proposal
MAP-1

060-020G
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	11,364
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		1,368
Total		12,732

Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0

Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	11,364
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		11,364

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The area is in essentially a natural condition, and is heavily vegetated on the north and east sides. A number of access routes to mining claims or other areas of interest exist within the unit because they are not maintained, they are highly eroded and becoming overgrown with brush. These routes are generally not apparent from most parts of the WSA, and the presence of twisting canyons, other topographic relief, and vegetation make them substantially unnoticeable. The major intrusion within the WSA is

the patented Pawnee Mine, surrounded by the WSA, and its associated structures and road. These intrusions are generally unobservable within the unit, and the works of man are substantially unnoticeable.

2. Solitude: Many features combine to ensure that opportunities for solitude are available throughout the study area. The WSA's relative remoteness, large size, rugged and diverse terrain, and dense vegetation support a sense of isolation and solitude. The majority of the boundary is adjacent to private land and access to the WSA is limited since permission of the landowner to cross his property is required.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The WSA currently supports a limited degree of hunting as well as hiking and backpacking. The diverse scenery provides attractive subject matter for both photography and painting. Deteriorating routes will continue to provide pedestrian access into the heart of the WSA.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 5,234 acres of the California Chaparral/Coastal Sagebrush and 6,130 acres of the California Chaparral/Chaparral ecosystems. The Beauty Mountain WSA would not increase the diversity of the chaparral types of ecosystems represented in the NWPS. These ecosystems are represented in currently designated wilderness areas.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
California Chaparral/Coastal Sagebrush	2	49,849	1	344
California Chaparral/Chaparral	17	462,256	10	81,080
	CALIFORNIA			
California Chaparral/Coastal Sagebrush	2	49,849	1	344
California Chaparral/Chaparral	17	462,256	10	81,080

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of seven major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Bakersfield	32	4,071,358	128	3,998,548
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Santa Barbara-Santa Maria-Lompoc	20	1,166,142	35	528,590
San Diego	15	1,043,680	100	3,378,814

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of seven BLM WSAs recommended for wilderness designation. The closest Federally designated wilderness area is the Agua Tibia Wilderness Area, administered by the Cleveland National Forest, located ten miles west. Also within a 50 mile radius are the following designated wilderness areas: Hauser, Pine Creek and San Mateo Canyon Wilderness Areas, administered by Cleveland National Forest; Santa Rosa, San Jacinto, and San Gorgonio Wilderness Areas, administered by San Bernardino National Forest; Joshua Tree Wilderness Areas, administered by Joshua Tree National Monument; and Mount San Jacinto and Anza Borrego Desert State Wilderness Areas.

C. Manageability

The Beauty Mountain WSA is manageable as wilderness. The fact that public access is restricted by the surrounding private land enhances manageability of the area as wilderness by virtually eliminating the possibility of intrusions by OHVs. However, there are factors that would complicate manageability to some degree.

The development of private inholdings would effect manageability of the Beauty Mountain WSA. Access needs and the effect of intruding sights and sounds could affect wilderness values.

Likewise, the valid existing rights retained by mining claimants have the potential to create manageability problems by affecting all-wilderness values. Mining claimants possessing valid existing rights can develop their claims in a manner reasonably incidental to their mining operation even if wilderness designation should occur. The only restrictions placed on these activities is that they not cause unnecessary or undue degradation, leaving sufficient latitude to cause severe impacts to existing wilderness values.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The WSA was not included in the BLM Geology-Energy-Mineral Assessment process completed in 1980. However, mineral resource data for the area was analyzed in the 1987 final EIS for the Western Counties Wilderness Study Project. Mineral data in the EIS indicated that the WSA had low potential for mineral occurrence. In 1983, over 30 placer mining claims, and 11 lode mining claims were recorded with the BLM in the WSA.

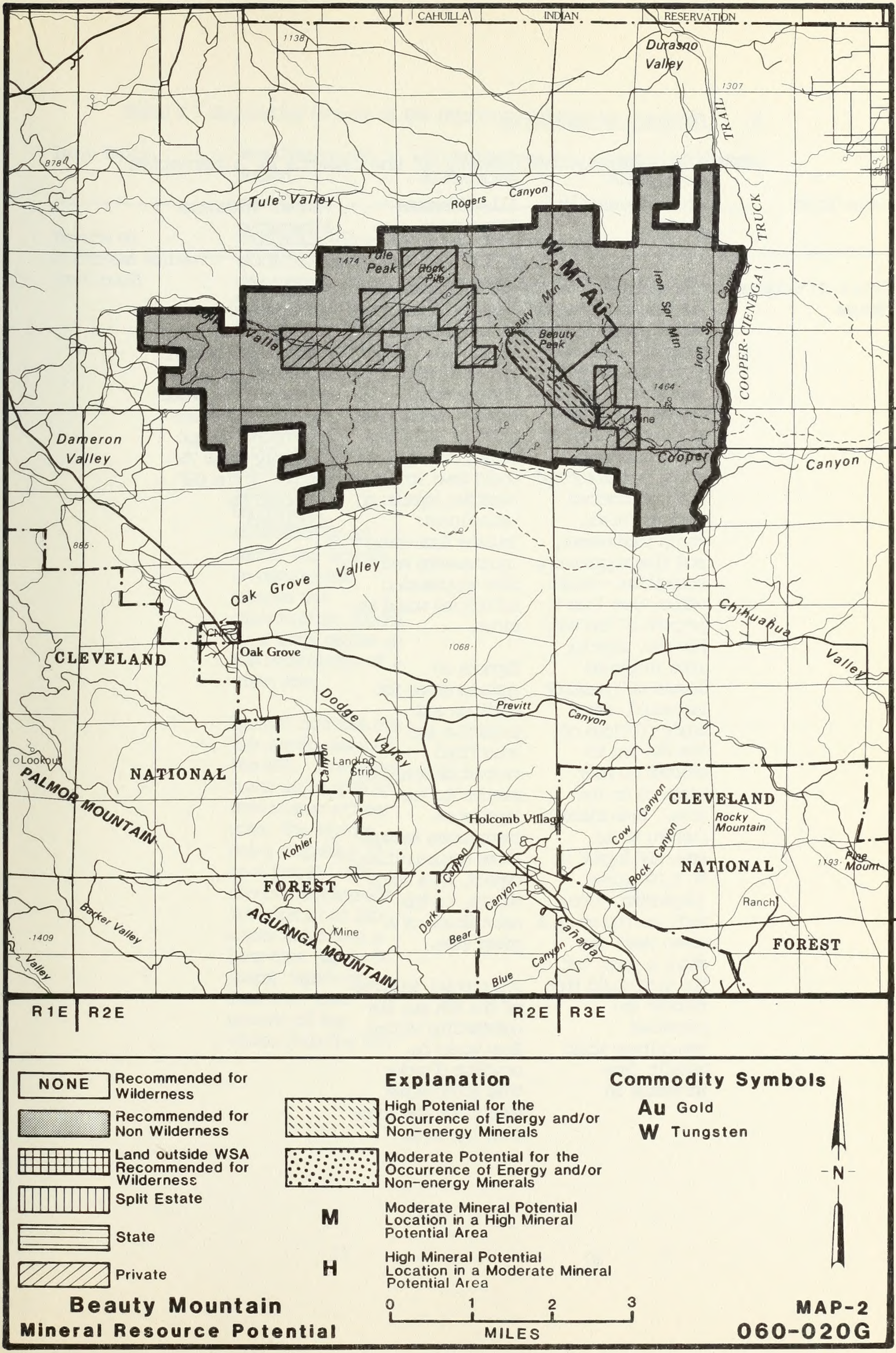
   In 1986, the BLM conducted a literature search and a drive-through survey of the WSA. It was found that the WSA contains known deposits of tungsten and minor amounts of gold. The most valuable deposits are in the southeastern portion of the WSA along a fault in which tungsten was historically produced from the Pawnee Mine (date and amount of production unknown). Several mining claims were recorded in this area with the BLM. During the drive-through survey intrusive pegmatites were observed throughout the WSA. In San Diego County, these pegmatites are historically found to contain gem or collector quality tourmaline and many mining claims have been patented in the past for this type of mineral. However, the pegmatites in the WSA were generally found to be small (one to ten inches) with only small fibrous tourmaline occurring.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should Be Considered in the Final Decision: The area along the fault zone from Beauty Peak to Cooper Canyon in the east-central portion of the WSA has a high potential for the occurrence of tungsten and a moderate potential for gold under the BLM classification system. These classifications are based on known occurrences and/or favorable geological environment and anomalous resource values, and are shown on the accompanying mineral potential map. No evidence of the occurrence of gem/collector quality minerals, leaseable mineral resources, mineral materials such as sand and gravel, or energy resources was found within the WSA.

   As of December, 1987, 11 unpatented lode mining claims aggregating 220 acres were on record with the BLM in the northeastern and southeastern portion of the WSA. Also, as of December, 1987 no mineral sales or leases had been isued within this WSA. The following table summarizes the mining claim records data:

Table 4 - Mining Claims

Type	No. Suitable	No. Nonsuit.	No. Total	Acres Suitable	Acres Nonsuit.	Acres Total
Mining Claims						
Lode	0	11	11	0	220	220
Placer	0	0	0	0	0	0
Mill Sites	0	0	0	0	0	0
Total	0	11	11	0	220	220



Beauty Mountain
Mineral Resource Potential

MAP-2
060-020G

E. Impacts on Resources

Table 5 - Comparative Summary of the Impacts by Alternative

Issue Topic	No-Wilderness/ No Action	All-Wilderness Alternative	Partial-Wilderness Alternative
Impact on Wilderness Values	The management actions under the No Wilderness/No Action proposal would have a moderate negative impact on wilderness values in the WSA. Some of the impacts on naturalness - those from motorized and nonmotorized recreationists, range improvement, and fire suppression activities - would affect less than 5 percent of the WSA. However, impacts from increased levels of livestock use would affect major portions of the WSA and be evident to many visitors to the area. Prescribed burning would severely impact up to 1,000 acres (depending on how much was burned in a given year) for about a year, but the area would then recover and perceived naturalness would benefit from increases in	Wilderness values would be retained on more than 95 percent of the WSA. While the elimination of OHV use would improve naturalness on about 700 acres, mining development would have long-term negative impacts on naturalness. Impacts from range improvements and fire suppression activities would be minor. Impacts on opportunities for solitude and primitive and unconfined recreation would be similar to the impacts on naturalness because those opportunities depend, to a large degree, on the naturalness of a given area. The special features of the WSA are its outstanding vistas. They would be unaffected under this alternative except for the long-term (up to 50	Impacts on wilderness values would be retained on more than 95 percent of the WSA and would be the same as under the All-Wilderness Alternative except that only about 75 percent of the ORV use would be eliminated.

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

Issue Topic	No-Wilderness/No Action	All-Wilderness Alternative	Partial-Wilderness Alternative
Impacts on Wilderness Values (continued)	vegetation vigor and wildlife. Mining development would have long-term negative impacts on naturalness on up to 500 acres of the WSA. Impacts on opportunities for solitude and primitive and unconfined recreation would mirror the impacts on naturalness because the opportunities depend to a large degree on the naturalness of a given area. Special features are the scenic views of the WSA. Prescribed burns would open up some vistas and mar some, the impacts being temporary (2 to 4 years). The mineral development anticipated on 210 acres would have a long-term (up to 50 years) impact on less than five percent of the vistas from the WSA.	years) impairment of less than five percent of them by the anticipated mineral development.	

Table 5 - Comparative Summary of the Impacts by Alternative (Cont'd)

Issue Topic	No-Wilderness/ No Action	All-Wilderness Alternative	Partial-Wilderness Alternative
Impact on Upland Game Species Habitat	Overall, benefits to deer and quail would be minor. Benefits from prescribed burning and water development would be mostly counterbalanced by habitat disturbance from mining.	There would be a minor reduction in deer and quail populations. Benefits from water developments and the elimination of OHVs would be more than counterbalanced by habitat disturbance from mining.	The impacts would be essentially the same as under the All-Wilderness Alternative.
Impact on Livestock Grazing	Forage allocations to livestock would increase by 50 AUMs(30 percent) within ten years. The forage utilization efficiencies of the operations would increase.	Forage allocations to livestock would remain at 150 AUMs.	Impacts would be the same as under the All-Wilderness Alternative.
Impact on Motorized Recreation Use Levels	Motorized recreational use would drop about 12 percent to approximately 185 VUDs per year.	There would be no motorized recreation use within the WSA.	Motorized recreational use would drop about 75 percent to slightly more than 50 VUDs per year.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Western Counties Wilderness Study Project EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

The following is a summary of all comments received. Inaccuracies that are known to exist are noted in parentheses.

1. Inventory Phase: Those who commented questioned the procedures of using roads to subdivide units, not treating solitude and primitive recreation synonymously, and application of "small" to various sized units. Some respondents mentioned roads outside the inventory which they

thought disqualified the unit as wilderness. Many respondents listed uses which they preferred for this land. These included mining, rockhounding, land exchanges, fire control, and wildlife management. The Pawnee Mine and access road were frequently cited as conflicting with wilderness.

The many comments on management of the unit apply to the Study Phase. Comments about features outside the unit and on the sight and sound doctrine were not used in evaluating the unit.

2. Draft Environmental Impact Statement: The Bureau recommended 6,190 acres of the WSA as suitable for wilderness and the remaining portion as nonsuitable.

   Eighteen respondents commented on the Beauty Mountain WSA. Twelve favored wilderness; of these, eight wanted the entire WSA designated suitable, while four accepted the Bureau's recommendation. Five respondents opposed wilderness altogether, and one requested that adequate arrangements be made for management and prevention of wildfires.

   Three of the individuals favoring wilderness mentioned the three rare plants which are found in this region (studies since then have determined that no rare plants are present in this WSA). Another stated that Beauty Mountain would be a valuable wilderness area, because low-altitude ecosystems are under-represented in the NWPS. One organization recommended enlarging the WSA by incorporating several surrounding inventory units and closing intervening roads. The area was said to provide outstanding opportunities for solitude and unconfined recreation, both of which would be particularly valuable in an area so close to major population centers.

   Opponents of wilderness mentioned the impact this status would have on mineral exploration and development. They preferred that the area be left open to these activities, although one stated that wilderness would be acceptable in areas which had been shown to be lacking in gold or strategic mineral resources.

   The USFS stated that wilderness management would be harmful to two listed species, the Stephen's kangaroo rat and the Least Bell's vireo (inventories since then have determined that no suitable habitat for either species exists within this WSA), and also to the gray fox, bobcat, mountain lion and mule deer, since it would not allow appropriate thinning and renewal of the chaparral habitat. The California Department of Forestry expressed concern that wilderness designation would interfere with its plans and methods for providing fire protection.

3. Supplemental Draft Environmental Impact Statement (SDEIS): The Bureau recommended that all of the WSA be designated nonsuitable for wilderness. Primary reasons were: (1) the possible impacts of wilderness on the California Department of Forestry's plans and methods for providing fire protection; (2) increasing mining activity in the southern part of the unit; and (3) proximity of designated wilderness in Anza-Borrego Desert State Park.

Of the 44 responses received in response to the SDEIS, 39 favored wilderness for this area. Most expressed shock and dismay at the Bureau's change of position concerning this WSA. Eight of the 39 were willing to accept the Bureau's original recommendation of 6,190 acres to be designated suitable. The remaining 31 wanted suitability recommendations for the entire area.

Many respondents argued that existing wilderness management policies allow for fire control and pre-suppression activities, and, hence, this was not an adequate reason for changing the suitability recommendation. They also stated that the existence of wilderness eight miles away in Anza Borrego Desert State Park did not eliminate the need for wilderness at Beauty Mountain. The climate at Beauty Mountain is suitable for year-round recreation, since it is warmer than the San Jacinto Wilderness and cooler than the Anza Borrego Wilderness. Further, the coastal sage brush ecosystem present at Beauty Mountain need additional representation in the NWPS. Also mentioned were the three rare plants and the State-listed rare Stephen's kangaroo rat which are found in the WSA (none of these species are found in the WSA), as well as the need for additional wilderness in this rapidly urbanizing region.

The five opponents of wilderness for Beauty Mountain gave the following reasons: a gem and mineral club wanted access to potential or existing mining claims and recreational mining spots; the Cleveland National Forest and an off-highway vehicle organization supported the Bureau's recommendation saying it would provide the best management for the Area; the San Diego Association of Governments and the Atlantic Richfield Co. opposed wilderness because of its possible impact on fire control.

San Ysidro Mountain

CA-060-022

SAN YSIDRO MOUNTAIN WILDERNESS STUDY AREA (WSA)

(CA-060-022)

1. THE STUDY AREA --- 2,125 acres

The San Ysidro Mountain WSA is located in northeastern San Diego County, about 18 miles west of Borrego Springs and 85 miles northeast of San Diego. This 2,125-acre WSA consists entirely of public lands administered by the BLM, although it is surrounded by other ownerships (see Map 1 and Table 1).

The boundary between public lands and the Los Coyotes Indian Reservation forms the north WSA boundary. On the east, the WSA adjoins Anza-Borrego Desert State Park for three-fourths of a mile, while the south boundary conforms to the boundary between public and private lands. An indentation in the WSA's west boundary excludes Buck Canyon with its dwellings, maintained road, and patented mining claims. The remaining mile of the west boundary again borders the Los Coyotes Indian Reservation.

The study area consists of the crest and south-facing slope of San Ysidro Mountain overlooking County Highway S22 and the unincorporated community of Ranchita. Elevations in the WSA range from 3,920 to 6,020 feet. The steep, rocky slopes are covered with chaparral, which gives way to stands of pine near the summit. Ribbons of green mark the major drainages, whose relatively lush vegetation includes sycamore, willow, and other deciduous trees, with a thick understory of herbaceous plants. Although all streams are intermittent, pools of standing water may still be found in the larger ones even in late summer. From Highway S22 the WSA boundary can be reached by two improved dirt roads that follow these drainages. The road in Buck Canyon provides access to the southwest edge of the WSA, while the Cherry Canyon road meets the southeast corner.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). The rationale for making this small, isolated parcel of public land a wilderness study area was that Anza-Borrego Desert State Wilderness Park was studying its adjacent land for possible inclusion into the State Wilderness System. That study has been completed and the State lands are now wilderness. The WSA is within BLM's Eastern San Diego County Planning Unit, for which a management framework plan (MFP) was completed in 1981. Two suitability recommendations were analyzed in the 1980 draft Environmental Impact Statement (EIS) on Livestock Grazing and Wilderness Management of the Eastern San Diego County Planning Unit, and the final EIS on the Wilderness Recommendations for the Eastern San Diego County Planning Unit Section 202 WSAs, completed in 1988: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE ---

0	acres recommended for wilderness
2,125	BLM acres recommended for nonwilderness

No wilderness is the recommendation for the San Ysidro Mountain WSA. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts. The entire acreage in this WSA is released for uses other than wilderness, and will continue to be managed in accordance with the Eastern San Diego County Planning Unit MFP. Since this is a broad-based, general plan, not all future management actions can be predicted with certainty. Projections have been made to allow analysis of the effects of the recommendation. Although the BLM is not necessarily committed to all of these actions, the following is an outline of reasonably feasible activities which could be expected to occur. Management guidelines will be implemented using all practical means to avoid or mitigate environmental impacts.

The all-wilderness recommendation is environmentally preferable, because it would result in the least change to the existing natural environment over the long term. It is not the recommendation for this WSA, however, for the reasons described below.

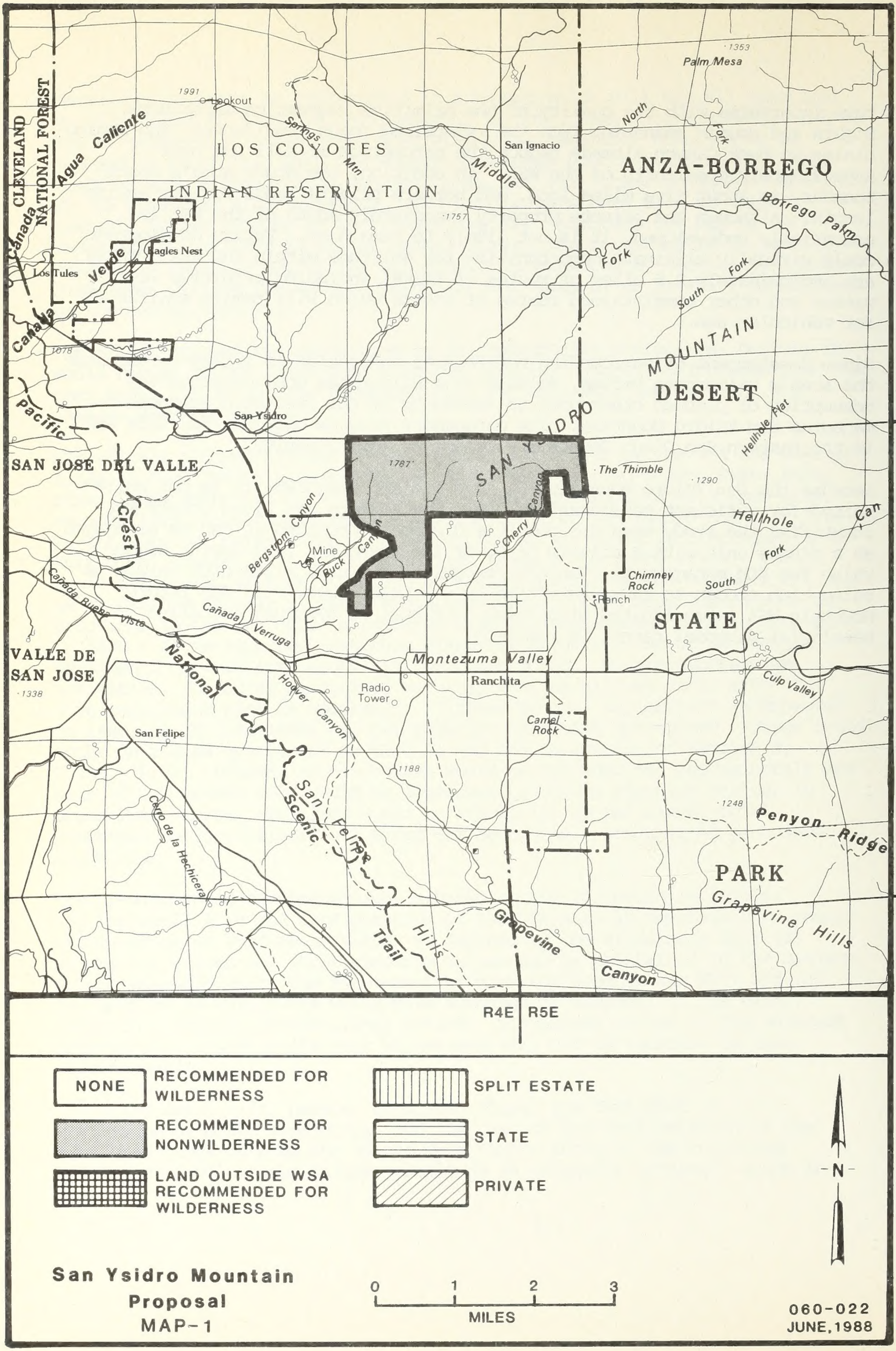
Significant planned actions include possible disposal of the WSA and adjacent lands in Buck Canyon as a single parcel to Anza-Borrego Desert State Park, other State agencies, or a private party; and construction of a four-mile, nonmotorized recreational trail along the crest of San Ysidro Mountain from Buck Canyon to Cherry Canyon. Construction of the trail is contingent upon sufficient demand, with a projected time frame of the late 1990s. If the area is disposed of after trail construction, public access on the trail will be maintained as part of the disposal agreement. Fire suppression will be practiced in the WSA until a resource area fire management plan is completed in 1990. It is expected that this plan will allow the use of mechanized equipment. No new firebreaks will be constructed. No pre-suppression activities, including prescribed burning, will be allowed until after the fire management plan is completed. Further mineral exploration is expected to lead, in the mid-1990s, to two underground mining operations. These could occur in the NW quarter of Section 11 and the SW quarter of Section 2, T.11S., R.4E. Present access routes would be upgraded and approximately one mile of new access road would be developed, avoiding riparian habitat in upper Buck Canyon. Tailings would be stockpiled at the mines; total disturbed surface will be 3.2 acres for each mine. Ore will be processed elsewhere.

The no-wilderness recommendation is based on the following rationale: (1) the small size and configuration of the WSA make it impossible to ensure preservation of wilderness values as defined by the Wilderness Act; (2) wilderness values and other resource values can be maintained to the maximum extent possible under the management program outlined in the MFP; and (3) designation as wilderness would make exchange or disposal of the parcel impossible without Congressional action. Wilderness values in the adjacent Anza-Borrego Desert State Park Wilderness will not be impacted by this recommendation.

The WSA's small size, narrow, elongated shape, the fact that it is surrounded by other ownerships, and the uses on and configuration of the developed lands outside the WSA in Buck Canyon threaten the continued existence of wilderness values. Solitude is primarily affected, which in turn interferes with the quality of the primitive recreation experience. Sights and sounds emanating from the maintained roads, residences, and mining claims in Buck Canyon already reduce the perception of solitude over approximately one-fourth of the WSA. In addition, the study area's south boundary is about five miles long, and borders private lands for its entire length. Although the private property immediately south of the WSA is essentially undeveloped, it is not likely to remain so. Future development could virtually eliminate opportunities for solitude within the WSA. There are approximately 2.5 miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use.

Since development of surrounding non-Federal ownerships is likely to threaten the area's wilderness values, release from wilderness consideration and resumption of planned other uses is deemed to be the realistic approach to managing San Ysidro Mountain. The management program outlined for this WSA in the Eastern San Diego County MFP is one of low-intensity.

Because the San Ysidro Mountain WSA is small and isolated, it is not well-suited for efficient management by BLM. The Eastern San Diego County MFP identified the study area for possible disposal, provided it can be exchanged as a single unit with a private party or the State for land having higher value for BLM management. The MFP recognized the area's resource values as being high enough to favor retention by a public agency. If San Ysidro Mountain WSA is designated wilderness, the goal of eventual mutually-beneficial disposal cannot be realized.



San Ysidro Mountain Proposal
MAP-1

060-022
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	2,125
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		2,125
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	2,125
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		2,125

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The San Ysidro Mountain WSA generally appears to have been affected by the forces of nature. Alterations to the natural landscape are limited to approximately one mile of abandoned jeep trail in Cherry Canyon, officially closed to motorized use, which leads to about six small abandoned mining prospects near the top of the ridge. Nearly the entire study area, including all the south-facing slopes and portions of the ridgetop, was burned by wildfire on July 14, 1975. Although this particular fire originated from trash burning, wildfires of natural origin are a common occurrence

in the region. Vegetative regeneration has progressed to the point where evidence of the fire is not noticeable to the casual observer.

2. Solitude: The size of the area and the uses on and configuration of the developed lands outside the WSA in Buck Canyon limit opportunities for solitude. Buck Canyon contains mining claims and associated small buildings, about nine residences, and an improved dirt road in the canyon bottom with spurs serving the various buildings. Sights and sounds emanating from this developed area reduce the perception of solitude over about one-fourth of the WSA. However, because current visitation is low, solitude can still be readily found, particularly out of Buck Canyon's immediate vicinity. The broken topography and vegetation also help screen visitors from each other.

3. Primitive and Unconfined Recreation: The area offers opportunities for hiking, nature study, and hunting for mule deer and upland game. Backpacking opportunities within the area itself are limited by its small size, but state park wilderness available for backpacking is adjacent to the east. Current recreation use is estimated at 50 to 100 visitor use days annually. Principal activities are mule deer and upland game hunting, and hiking. Target shooting, rockhounding, and informal nature study also occur.

4. Special Features: Within the WSA are two plant species which are Federal candidates for listing as threatened or endangered: Orcutt's brodiaea (*Brodiaea orcuttii*) and Fairchild's lily (*Lilium fairchildii*). No candidate wildlife species are known within the WSA. However, the loggerhead shrike, considered sensitive in Region 1 by the U.S. Fish and Wildlife Service, occurs here.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 2,125 acres of the California Chaparral/California Oakwoods ecosystem. Wilderness designation of the San Ysidro Mountain WSA would not increase the ecological diversity of the NWPS. This ecosystem is currently represented by other, areas in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
	NATIONWIDE			
California Chapparal/ California Oakwoods	4	105,301	6	37,601
	CALIFORNIA			
California Chapparal/ California Oakwoods	4	105,301	6	37,601

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of seven major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Bakersfield	32	4,071,358	128	3,998,548
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Santa Barbara-Santa Maria-Lompoc	20	1,166,142	35	528,590
San Diego	15	1,043,680	100	3,378,814

3. Balancing the geographic distribution of wilderness areas: The San Ysidro Mountain WSA is within 50 air miles of ten BLM WSAs recommended for wilderness designation. The closest designated wilderness is in the adjacent Anza-Borrego Desert State Park. Less than 50 air miles away are six other wilderness areas: Agua Tibia, Santa Rosa, Pine Creek, and Hauser, administered by the U.S. Forest Service; and Mt. San Jacinto and Cuyamaca Mountains State Wilderness Areas.

C. Manageability

The WSA is unmanageable as wilderness. Its size, the USGS, and configuration of developed lands outside make it impossible to ensure outstanding opportunities for either solitude or primitive and unconfined recreation. Outside sights and sounds already limit solitude in a significant portion of the WSA. Additional development of private property which borders directly on the WSA for about five miles is likely at some time in the future, and would further restrict opportunities for solitude and the quality of the primitive recreation experience available within this WSA.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

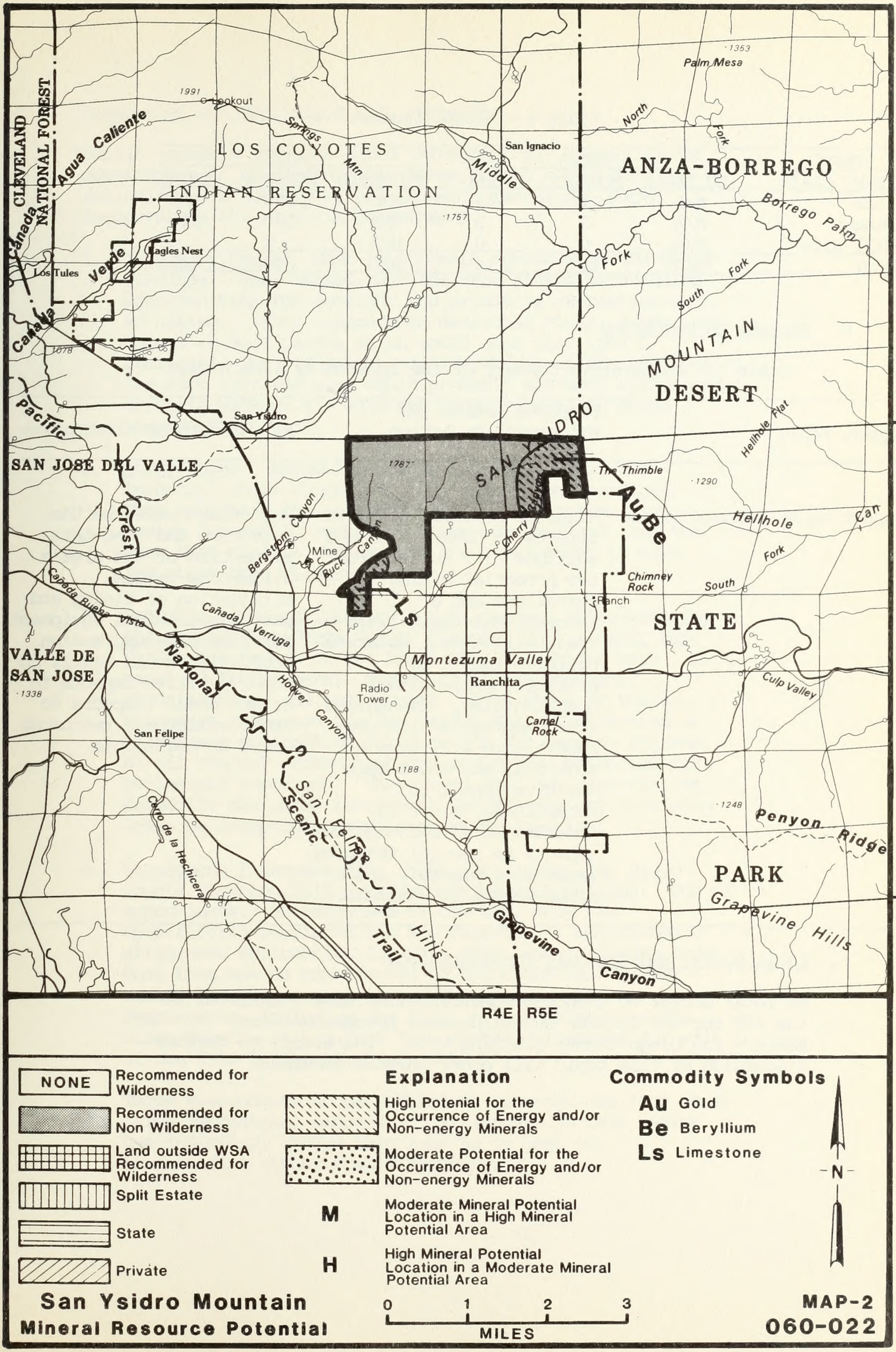
D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The San Ysidro Mountain WSA is located in the BLM McCain Valley Geology-Energy-Mineral (G-E-M) Resource Area (GRA). GRA file data indicate the existence of mineral occurrences in the WSA. However, the GRA file is much too broad in scope to classify this WSA for occurrence potential.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: The 1963 California Division of Mines and Geology (CDMG) County Report 3 lists San Diego County mines and prospects by commodity that were known up to 1962. The report indicates that the eastern area of the WSA was mined in 1915 for pink beryl. This area was also mined for gold from 1890 to 1915. A formation of marble (limestone) extends into the southern part of the WSA. Map 2 illustrates the areas that have been determined to have a high potential for occurrence of these commodities.

   The U.S. Geological Survey designated the area that includes this WSA as potentially valuable for geothermal resources in 1978.

   The San Ysidro Mountain WSA is included in the Montezuma mining district. The WSA contained 14 unpatented lode and placer mining claims as of December 1987, concentrated in the southwestern portion of the area. Also, as of December 1987 no mineral sales or leases had been issued within the WSA. The following table summarizes the active mining claims.



San Ysidro Mountain
Mineral Resource Potential

MAP-2
060-022

Table 4 - Mining Claims

TYPE	NUMBER			ACRES		
MINING CLAIM	SUITABLE	NONSUIT.	TOTAL	SUITABLE	NONSUIT.	TOTAL
Lode	N/A	11	11	N/A	220	220
Placer	N/A	3	3	N/A	120	120
Mill Site	N/A	0	0	N/A	0	0
Total	N/A	14	14	N/A	340	340

E. Impacts on Resources

Table 5 - Comparative Summary of the Impacts by Alternative

Impact Topic	Proposed Action (No Wilderness/No Action	All Wilderness-Alternative
Impact on Wilderness Values	Minor to moderate negative impacts to naturalness and solitude will result from two potential mining operations and a recreational trail. This trail will have a moderate positive impact on primitive recreational opportunities. Mechanized fire suppression and pre-suppression will have a moderate, but short-term negative impact to naturalness, minor to moderate localized negative impacts to special features (sensitive plants), and a minor impact to solitude.	Net effect would be the retention and long-term protection of the area's wilderness values. Elimination of mining and use of mechanical equipment for fire pre-suppression activities would result in minor positive impacts to naturalness. Impacts to other wilderness resources would be negligible

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the EIS for the Section 202 Wilderness Recommendations, Eastern San Diego County Planning Unit. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

Public comments were solicited throughout all phases in the development of the Eastern San Diego County MFP. The following is a summary of all comments received. Known inaccuracies are noted in parentheses.

1. Inventory Phase: Some respondents agreed with the BLM's findings. They stated that the area offers outstanding opportunities for solitude and primitive recreation such as hiking. Other respondents mentioned roads, mines, and houses in Buck Canyon which would make that area ineligible for wilderness consideration. Also noted was the fact that the area would probably not meet wilderness criteria without the adjacent proposed area in Anza-Borrego State Park.

2. Study Phase: Several comments received during the inventory phase concerned study phase considerations. They mentioned the need for wildlife protection, the desire for public access to Cherry Canyon Road, and the view that mineral exploration and development is more important than wilderness.

3. Proposed Livestock Grazing and Wilderness Management for the Eastern San Diego County Planning Unit - Draft EIS: During the review of the Draft EIS, 23 letters were received from Federal, State, and local agencies, organizations, and individuals. Only three of these responses addressed the San Ysidro WSA. Two favored a wilderness designation for this WSA but gave no reasons. An oil company stated that the region has potential for geothermal resources. They urged that the potential be carefully evaluated throughout the WSA and any promising areas be exempted from wilderness designation.

4. Management Framework Plan (MFP) for Eastern San Diego County Planning Unit - Wilderness Recommendations: Out of approximately 60 responses to the MFP, only two specifically mentioned the San Ysidro WSA; one wanted a wilderness designation for this unit, and the other urged that this WSA be transferred to the State Park System rather than being sold to private owners. Eleven other respondents, including the Board of Supervisors of San Diego County, stated that they wanted wilderness for all of the WSAs in the planning unit.

   Three respondents whose particular interest was four-wheel drive recreation, opposed all wilderness in this region. One individual wanted this land to be used for homesteading rather than wilderness.

San Felipe Hills

CA-060-023

SAN FELIPE HILLS WILDERNESS STUDY AREA (WSA)

(CA-060-023)

1. THE STUDY AREA --- 5,325 acres

The San Felipe Hills WSA is located in northeastern San Diego County, about 18 miles west of Borrego Springs and 85 miles northeast of San Diego. The study area is two miles west of the unincorporated community of Ranchita, and its southeast corner borders Anza-Borrego Desert State Park. This 5,325-acre WSA consists entirely of public lands administered by the BLM (see Map 1 and Table 1).

Sandwiched between County Highways S22 and S2, the San Felipe Hills WSA is an isolated parcel of public land entirely surrounded by other ownerships, which accounts for the WSA's irregular shape. From the northwest corner of the WSA near Barrel Spring and County Highway S22, the study area boundary follows section lines, that form the legal boundary between public and private lands, east for one and one-quarter miles. Then trending south and east, the boundary continues to conform to the public-private property line for two and one-half miles until it meets a powerline at the head of Grapevine Canyon. Following the powerline approximately one and one-half miles southeast down the canyon, the study area excludes about 60 acres of public land located north of the powerline. Then once again conforming to the irregular public-private property line, the WSA boundary winds for four and one-quarter miles to the edge of Anza-Borrego Desert State Park, following the state park boundary due south for one and three-quarter miles. At the WSA's southeast corner, the boundary again meets private property fronting on County Highway S2. The WSA boundary then runs west and north along the property lines, generally paralleling the highway for six and three-quarter miles, until it heads due north for one and three-quarter miles back to the northwest corner.

The WSA is a northwest- to southeast-trending ridge, six and one-half miles long and one-half to one and one-half miles wide. The terrain consists of rolling hills that rise steeply from the surrounding valleys. Elevations range from 2,800 to 4,660 feet. The hills are covered with dense, scrubby chaparral, with small clusters of live oak and scrub oak on the lower slopes. A portion of the Pacific Crest National Scenic Trail passes through the study area.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). The WSA is within BLM's Eastern San Diego County Planning Unit, for which a management framework plan (MFP) was completed in 1981. Various suitability recommendations were analyzed in the draft and final Environmental Impact Statements (EISs), on the Wilderness Recommendations for the Eastern San Diego County Planning Unit, completed in 1986. Two different suitability recommendations were analyzed in the EISs: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE ---

0 acres recommended for wilderness
5,325 BLM acres recommended for nonwilderness

No wilderness is the recommendation for the San Felipe Hills WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The all-wilderness recommendation is environmentally preferable, because it would result in the least change to the existing natural environment over the long term. It is not the recommendation for this WSA, however, for the reasons described below.

The WSA will continue to be managed in accordance with the 1981 Eastern San Diego County MFP, as amended. Since this is a broad-based, general plan, not all future management actions can be predicted with certainty. Projections have been made to allow analysis of the effects of the recommendation. Although the BLM is not necessarily committed to all of these actions, the following is an outline of reasonably feasible activities which could be expected to occur. Recreation management actions will be directed toward enhancing nonmotorized recreation opportunities on the Pacific Crest National Scenic Trail, which runs the length of the WSA. With the exception of one-quarter mile of jeep trail, all vehicle routes have been and will remain closed to motorized use. Existing levels of grazing in the San Felipe Allotment will continue. There are approximately four miles of routes of travel including primitive ways, washes and other unmaintained routes of access which will remain available for vehicular use.

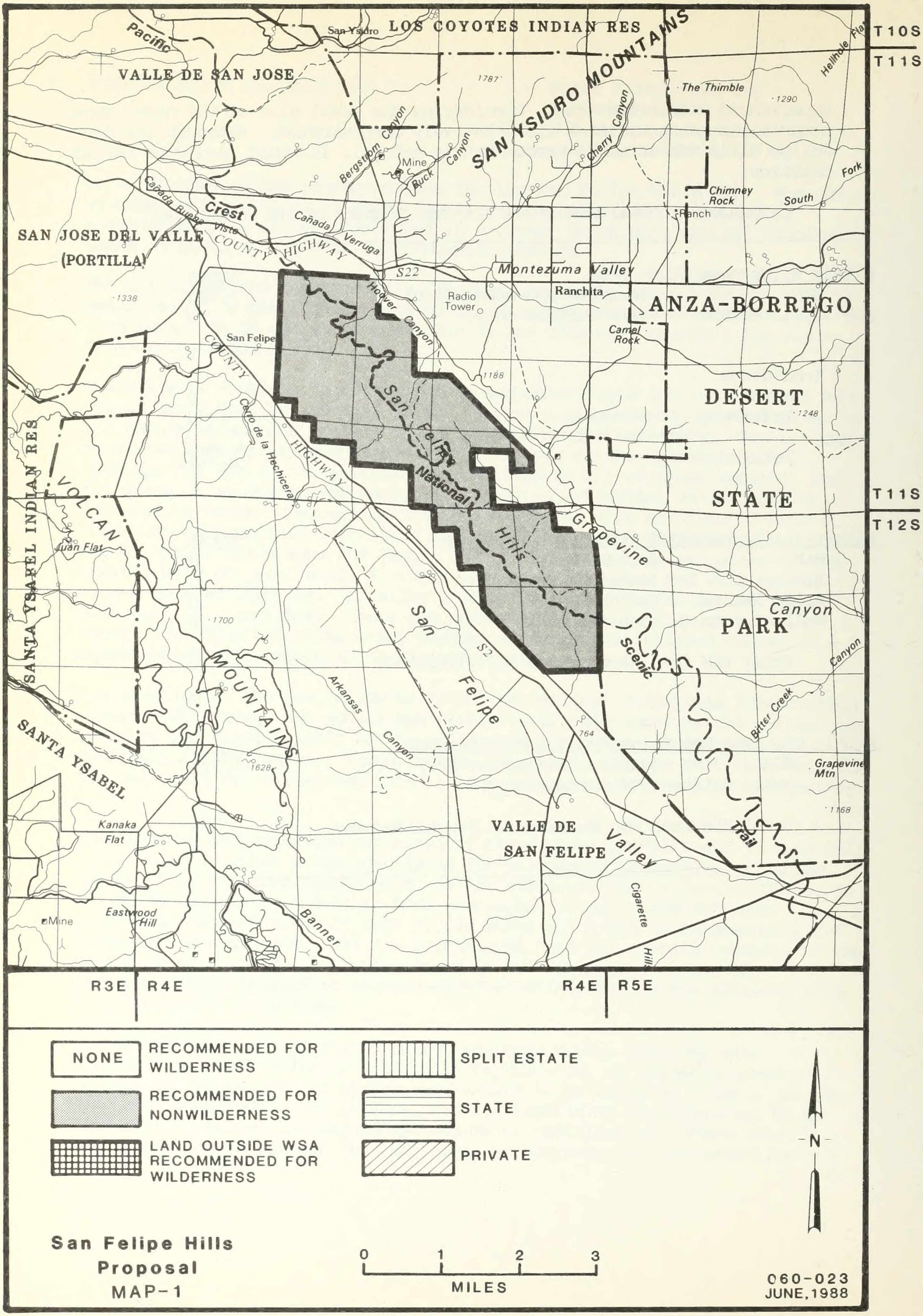
The addition of the San Felipe Hills to the National Wilderness Preservation System (NWPS) would not add to the diversity or uniqueness of the system, nor would it add significantly to the wilderness recreation opportunities available in the region. These factors, combined with the fact that this WSA has only marginal wilderness values, led to the nonwilderness recommendation.

The landform and ecosystem exhibited by the San Felipe Hills are already well represented in other areas identified for wilderness preservation. Three nearby WSAs, Sawtooth Mountains B, 20 air miles southeast; Carrizo Gorge, 30 air miles southeast; and Santa Rosa Mountains, 25 air miles northeast, contain a combined total of over 97,000 acres which BLM is recommending for wilderness designation. All are mountainous, and all contain examples of the same type of chaparral ecosystem found in the San Felipe Hills. In addition, there is similar State-designated wilderness in the adjacent Anza-Borrego Desert State Park.

The naturalness and opportunities for solitude within this WSA only minimally meet the criteria defined in Section 2(c) of the Wilderness Act. Because the study area is narrow, and exists as an isolated ridge of public land nearly surrounded by private property containing developments, it is difficult to escape the sights and sounds of civilization. These outside sights and sounds detract from the sense of solitude and remoteness to be experienced within the area. Considering the small size of the area, human alterations to naturalness are relatively concentrated. Although the San Felipe Hills WSA is still predominantly natural, it could hardly be called pristine.

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	5,325
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		5,325
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	5,325
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		5,325



San Felipe Hills Proposal

MAP-1

060-023
JUNE, 1988

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The San Felipe Hills WSA generally appears to have been affected by the forces of nature, with human influences unnoticeable for the most part. Human imprints in the area consist of about ten miles of fire breaks and primitive ways, three miles of maintained range fencing, two miles of abandoned range fencing, a livestock water tank and trough, and two abandoned spring developments, each consisting of a battered trough and several hundred feet of broken pipe. In addition, the WSA contains 11.8 miles of the Pacific Crest National Scenic Trail winding along the ridgetop. Human alterations to the natural environment are visible from many parts of the WSA. These intrusions, the elongated shape of the unit, and the presence of a powerline forming the northeastern boundary, combine to create a diminished sense of naturalness to the observer.

2. Solitude: The area's topographic variation, low visitation, and the dense vegetation combine to allow ample opportunities for solitude, despite the area's small size. However, because of the area's small size it is difficult to escape outside sights and sounds, which reduce the feeling of remoteness.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The area offers good opportunities for primitive or unconfined types of recreation. The Pacific Crest National Scenic Trail enhances primitive and unconfined recreation along the crest of the San Felipe Hills, although these opportunities are limited by the lack of potable water sources. This portion of the trail, completed in 1985, currently receives an estimated 250 visitor-use days per year. Use is expected to increase to approximately 1,500 visitor-use days per year by 1988 when connecting trail segments outside the WSA are completed and through-traffic is routed via the San Felipe Hills. Currently, trail use is centered primarily around day hiking and riding, sightseeing, and rockhounding. Backpacking and horse packing will account for a major portion of the increase in use expected following completion of the connection with the rest of the Pacific Crest National Scenic Trail. At present, the San Felipe Hills form part of a trail segment nearly 30 miles long which is without a potable water source.

4. Special Features: An 11.8-mile, fully constructed segment of the Pacific Crest National Scenic Trail is within the San Felipe Hills WSA. Open to non-motorized use only, this Congressionally-designated national scenic trail follows the crests of the west coast mountains from Canada to Mexico.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 5,325 acres of the California Chaparral/California Oakwoods ecosystem. Wilderness designation of the San Felipe Hills WSA would not increase the ecological diversity of the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
California Chaparral/ California Oakwoods	4	105,301	6	34,401
	CALIFORNIA			
California Chaparral/ California Oakwoods	4	105,301	6	34,401

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of seven major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Bakersfield	32	4,071,358	128	3,998,548
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
Santa Barbara-Santa Maria-Lompoc	20	1,166,142	35	528,590
San Diego	15	1,043,680	100	3,378,814

3. Balancing the geographic distribution of wilderness areas: The San Felipe Hills WSA is within 50 air miles of 10 BLM WSAs recommended for wilderness designation. The closest designated wilderness is in the adjacent Anza-Borrego Desert State Park. Less than 50 air miles away are six other wilderness areas: Agua Tibia, Santa Rosa, Pine Creek, and Hauser, administered by the U.S. Forest Service; and Mt. San Jacinto and Cuyamaca Mountains State Wilderness Areas.

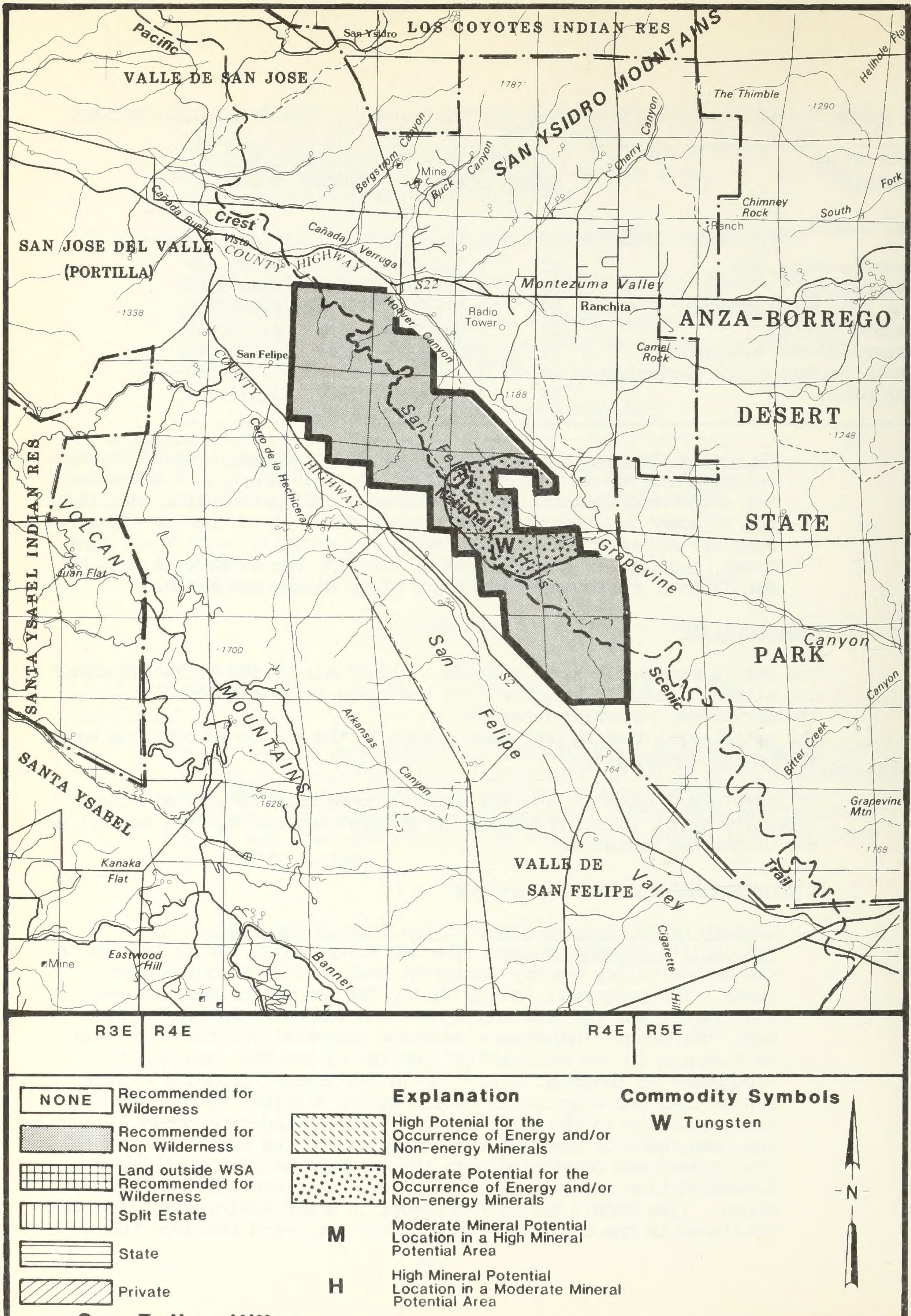
C. Manageability

The WSA is manageable as wilderness. Almost all of its primitive ways are already closed to vehicles, and the rough terrain precludes indiscriminate vehicular trespass.
The established grazing use which occurs in the WSA could continue under wilderness designation.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The San Felipe Hills WSA is located in the McCain Valley Geology-Energy-Mineral (G-E-M) Resource Area (GRA). BLM prepared a McCain Valley GRA Report in 1980; however, that report was for the entire area and was not specific to this WSA. The report indicates a moderate potential for the occurrence of tungsten in the east-central portion of the WSA (See Map 2). Prospects for tungsten were found in replacement deposits within schist rock and near contacts with quartz diorite. These deposits were developed in the early 1950s. Although moderate potential for the occurrence of tungsten was acknowledged, the potential for development was considered very low at the time of the wilderness recommendation process. No other mineral resources potentials were known. (The McCain Valley GRA Report is a BLM administrative report available in the California Desert District G-E-M resource files).



San Felipe Hills

Mineral Resource Potential

MAP-2

060-023

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: No U.S. Geological Survey and U.S. Bureau of Mines mineral surveys were conducted for the WSA since it is recommended nonsuitable for wilderness designation.

The 1963 California Division of Mines and Geology (CDMG) County Report 3 shows mining prospects for tungsten in the eastern part of the WSA, which supports BLM's determination of moderate tungsten potential. In addition, the report shows two gold prospects associated with the tungsten prospects, and one occurrence of phosphates in an apatite dike in crystalline limestone. South of the WSA, over $1 million in gold was mined from underground mines during the period 1857 through 1937 in the Montezuma gold mining district. Similar geology to this mining district extends into the WSA. However, the WSA cannot be classified for the occurrence of gold due to lack of sufficient data.

According to BLM records, as of December 1987, there were no unpatented mining claims, mineral sales or mineral leases within the San Felipe Hills WSA.

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Issue Topic	Proposed Action (No-Wilderness/No Action)	All-Wilderness Alternative
Impact on Wilderness Values	Development of two water sources and completion of the Pacific Crest National Scenic Trail outside the WSA will increase visitor-use from 250 visitor-use days annually to 1,500 visitor-use days, moderately benefiting primitive and unconfined recreation, but slightly impairing the area's naturalness and solitude. Fire suppression will have a moderate, short-term negative impact on wilderness values if mechanized equipment is used, but impacts will be reduced by post-suppression reclamation (harrowing and hand-seeding).	Impacts on wilderness values are the same as those described in the Proposed Action; however, mechanized fire fighting equipment will be restricted, thereby reducing any surface disturbance associated with this activity and resultant adverse impacts to the area's wilderness values.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the EIS for the Wilderness Recommendations, Eastern San Diego County Planning Unit. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

Public comments were solicited throughout all phases in the development of the Eastern San Diego County MFP. The following is a summary of all comments received. Known inaccuracies are noted in parentheses.

1. Inventory Phase: Most comments were in agreement with the BLM's findings. Respondents noted the values of the unit and its opportunities for solitude and primitive recreation such as hiking. Others mentioned roads, radio towers, ranches and homes just outside the WSA which they thought interfered with wilderness. Other comments addressed study phase considerations.

2. Study Phase: Several comments received during the inventory phase concerned study phase considerations. They mentioned the valuable minerals and rare earths believed to be located within the unit. Rockhounders wanted vehicle access to their favorite collecting sites.

3. Proposed Livestock Grazing and Wilderness Management for the Eastern San Diego County Planning Unit - Draft EIS: The proposed action recommended that this WSA be designated non-suitable for wilderness. The rationale was that it is bisected by old firebreaks, and rehabilitation may not be effective. In addition, the WSA's visual resources are poor.

   During the review of the Draft EIS, 23 letters were received from Federal, State and local agencies, organizations and individuals. Only three of these responses addressed the San Felipe Hills WSA. Two favored a wilderness designation for the unit. The Sierra Club, San Diego Chapter, wanted the decision on wilderness status deferred until about 2001 and the area managed in as close to wilderness conditions as possible. This would allow healing of the old firebreak scars and perhaps, changes in other factors, such as available manpower, so that effective wilderness management would be possible.

   The third respondent, an oil company, stated that the region has potential for geothermal resources. They urged that the potential be carefully evaluated throughout the WSA and any promising areas be exempted from wilderness designation.

4. Management Framework Plan (MFP) for Eastern San Diego County Planning Unit - Wilderness Recommendations: The suitability recommendation for the San Felipe Hills WSA was the same as that described above for the Draft EIS on wilderness management. The entire unit was recommended nonsuitable.

   Out of approximately 60 responses to the MFP, none specifically mentioned the San Felipe Hills WSA. However, eleven respondents, including the Board of Supervisors of San Diego County, stated that they wanted wilderness for all of the WSAs in the planning unit.

   Three respondents whose particular interest was four-wheel drive recreation, opposed all wilderness in this region. One individual wanted this land to be used for homesteading rather than wilderness.

Sawtooth Mountains A

CA-060-024A

SAWTOOTH MOUNTAINS A WILDERNESS STUDY AREA (WSA)

(CA-060-024A)

1. THE STUDY AREA --- 3,883 acres

The Sawtooth Mountains A WSA is located in east-central San Diego County, about 35 miles south of Borrego Springs and 95 miles east of San Diego. This WSA consists entirely of public lands administered by the BLM (see Map 1 and Table 1). It is separated from the much larger, Sawtooth Mountains B WSA (CA-060-024B), which is recommended for wilderness designation, by a one-lane dirt road and a private ranch in Storm Canyon.

The north WSA boundary traces the boundary between public and private lands. The public land in this area comprises only portions of sections, creating an irregular, stair-step shape for the north side of the WSA. At the northeast corner near County Highway S2, the east WSA boundary cuts off an approximate 80-acre parcel of public land lacking wilderness characteristics, and then once again follows the public-private land boundary to a location just south of Troutman Mountain. Here the Storm Canyon road becomes the boundary, separating Sawtooth Mountains A from Sawtooth Mountains B. Near the head of Storm Canyon, the boundary leaves the road to skirt private property containing a ranch. The remaining mile of the south boundary on the flanks of Garnet Peak adjoins the Cleveland National Forest. The mile-long west WSA boundary adjoins an isolated portion of Anza-Borrego Desert State Park.

The WSA is situated between County Highways S1 and S2 at a location where the two highways are only five miles apart, yet there is no public vehicular access from either highway. Highway S2 passes within a quarter mile of the area's northeast corner. Although the Storm Canyon road forming part of the WSA's east boundary connects with the highway, it is a private road protected by a locked gate, not available for use by the general public. Sawtooth Mountains A WSA includes parts of two grazing allotments, Vallecitos and Oriflamme.

About 75% of the WSA is a steep ridge running northeast to southwest; the remaining 25% is alluvial valley. Elevations range from 1,760 to 5,360 feet. Desert scrub covers the valley floor and the lower portion of the ridge, with chaparral appearing at about 2,800 feet on some of the north-facing slopes. The higher elevations are completely covered with dense chaparral. A spring near the north edge of the WSA is the only known permanent water source.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). The WSA is within BLM's Eastern San Diego County Planning Unit, for which a management framework plan (MFP) was completed in 1981. Two suitability recommendations were analyzed in the 1980 draft EIS on Livestock Grazing and Wilderness Management of the Eastern San Diego County Planning Unit, and the final EIS on the Wilderness Recommendations for the Eastern San Diego County Planning Unit Section 202 WSAs, completed in 1988: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE ---

0	acres recommended for wilderness
3,883	acres recommended for nonwilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

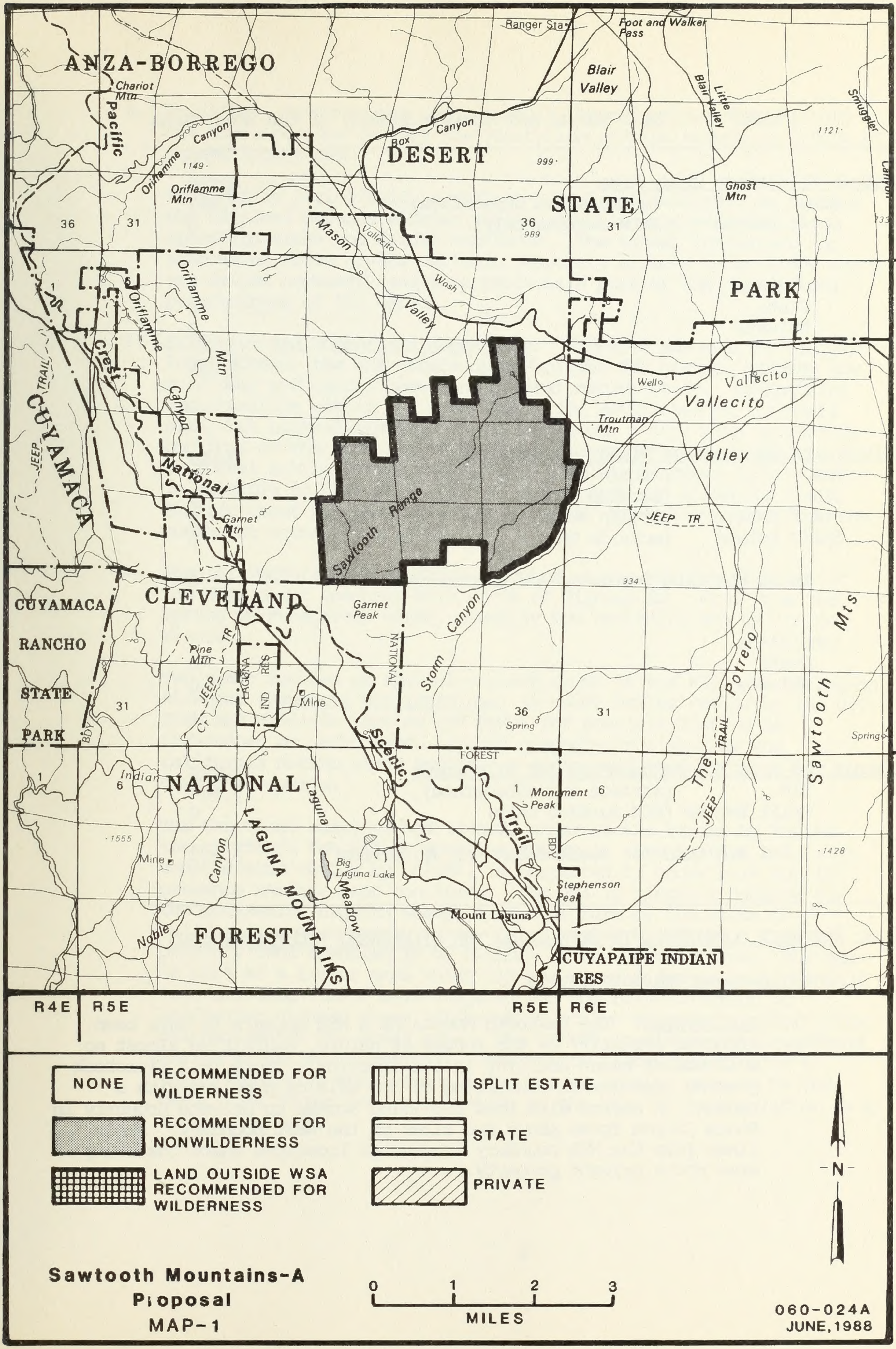
All wilderness is the environmentally preferable alternative. This is because it will result in the least change from the existing natural environment over the long term. It is not the recommendation for this WSA, however, for the reasons described below.

The Sawtooth Mountains A WSA will continue to be managed in accordance with the Eastern San Diego County Planning Unit MFP, as amended. Since this is a broad-based, general plan, not all future management actions can be predicted with certainty. Projections have been made to allow analysis of the effects of the recommendation. Although the BLM is not necessarily committed to all of these actions, the following is an outline of reasonably feasible activities which could be expected to occur. Mineral exploration is expected to lead to the development in the mid-1990s of one small underground mining operation in T. 5 E., R. 14 S., section 13. Less than one-half mile of new road would be constructed and one acre would be used for tailings. Ore processing would occur outside the WSA. No routes of travel have been identified within the WSA.

The no wilderness recommendation is based on the following rationale: (1) the release of adjacent National Forest lands from wilderness consideration makes a combined area of over 5,000 acres impossible, (2) current management has proven effective in maintaining the area's existing resources, (3) the WSA may be unmanageable as wilderness because of the likelihood of intrusions on wilderness values from adjacent private lands, and (4) the wilderness values of the area are not considered outstanding.

Sawtooth Mountains A was made a wilderness study area because it is contiguous with 1,600 acres of Cleveland National Forest (USFS) lands which were thought to have potential wilderness values during the BLM inventory. The 1,600-acre USFS parcel could have linked BLM's Sawtooth Mountains A and Sawtooth Mountains B WSAs, which are otherwise separated by a road and private lands. The USFS studied the 1,600-acre parcel and recommended it nonsuitable for wilderness designation in the draft Environmental Impact Statement (EIS) for the Cleveland National Forest Plan. Before the final EIS for the Forest Plan was completed, the 1,600-acre parcel was released from further wilderness study by the California Wilderness Act of 1984.

The WSA's small acreage compared with its relatively lengthy, ten-mile boundary with private lands would make it impossible to ensure outstanding opportunities for either solitude or primitive and unconfined recreation. If further development of the private property occurs, sights and sounds from that area, with its finger-like intrusions into the north side of the WSA, would reduce the WSA's wilderness values.



Sawtooth Mountains-A
Proposal
MAP-1

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	3,883
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		3,883
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	3,883
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		3,883

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Sawtooth Mountains A WSA appears to have been affected primarily by the forces of nature, exhibiting almost no evidence of human activity in its interior. There is a livestock grazing improvement consisting of one mile of pipeline with a trough. A narrow dirt road providing access to private property in Storm Canyon forms about two miles of the east boundary. Fence lines form the WSA boundary in several locations where the study area abuts private property.

2. Solitude: Although the area is small, opportunities for solitude are ample because of very low visitation and the screening effect of rugged topography.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Hampered somewhat by limited legal access, the WSA offers opportunities for hiking, hunting for mule deer and upland game, and general nature study. Backpacking opportunities within the area itself are restricted by its small size, but backpackers need only walk across a dirt road to include portions of the much larger Sawtooth Mountains B WSA in their trip. No formal hiking trails exist, so all hiking is cross-country. It is possible to hike onto the National Forest and intercept the Pacific Crest National Scenic Trail about one-quarter mile from the southwest corner of the WSA.

4. Special Features: One spring is found at the northern extreme of the WSA, about one-half mile south of Highway S2. Flow from the spring is relatively minor, normally not exceeding one gallon per minute.

   Two plant species of special concern occur in the WSA. Mount Laguna alumroot (*Heuchera brevistaminea*) is under status review by the U.S. Fish and Wildlife Service (US F&WS) for possible listing as threatened or endangered. *Ayenia compacta* is listed by the California Native Plant Society as endangered in California but more common elsewhere.

   The San Diego coast horned lizard, under status review by USF&WS, occurs within the WSA on granitic outcrops. The spotted bat, also under status review by USF&WS, is suspected to occur here but its presence has not been confirmed. The WSA is historic habitat for the peninsular bighorn sheep, listed as rare by the State of California and currently under status review by USF&WS. The area is probably used transiently by bighorn at the present time. The WSA is part of a larger area which BLM and the California Department of Fish and Game (CDFG) have targeted for the reintroduction of peninsular bighorn sheep, although no active management efforts are planned inside the study area. The USF&WS considers the loggerhead shrike sensitive in Region 1. The willow flycatcher is also a USF&WS sensitive species and a species of special concern to the CDFG. The former occurs year-long in the WSA, while the latter is a summer resident.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 3,883 acres of the California Chaparral/California Oakwoods ecosystem. Wilderness designation of the Sawtooth Mountains A WSA would not increase the ecological diversity of the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
	NATIONWIDE			
California Chaparral/ California Oakwoods	4	105,301	6	35,843
	CALIFORNIA			
California Chaparral/ California Oakwoods	4	105,301	6	35,843

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of five major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814

3. Balancing the geographic distribution of wilderness areas: The Sawtooth Mountains A WSA is within 50 air miles of seven BLM WSAs recommended for wilderness designation, including the adjacent Sawtooth Mountains B WSA. The closest designated wilderness is in

Anza-Borrego Desert State Park. Less than 50 air miles away are five other wilderness areas: Agua Tibia, Santa Rosa, Pine Creek, and Hauser, administered by the U.S. Forest Service; and Cuyamaca Mountains State Wilderness Area.

C. Manageability

The WSA may not be manageable as wilderness. Its small acreage compared with its relatively lengthy, ten-mile boundary with private lands would make it impossible to ensure future outstanding opportunities for either solitude or primitive and unconfined recreation. If further development occurs, sights and sounds from the private property, with its finger-like intrusions into the north side of the WSA, would reduce the WSA's wilderness values. Although the private property presently contains few improvements, it is conceivable that wilderness designation could spur accelerated development of much of the private property.

The two grazing allotments which exist within the WSA are not expected to create any manageability problems if this area were designated wilderness.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Sawtooth Mountains A WSA lies within the BLM Vallecito Mountains Geology-Energy-Mineral (G-E-M) Resource Area (GRA). There were no mining claims located in the WSA in 1980. The 1980 GRA Report indicates that mineral resource information on the WSA was insufficient to determine the mineral potential classification of the WSA.

   Weber (1963, Geology and mineral resources of San Diego County, California, California Division of Mines and Geology, County Report 3) lists, by commodity, the known mines and mineral occurrences within this WSA and the immediate area. The southwestern portion has two prospects for tungsten. Two gold prospects were located in the north, north-central, and central portion of the WSA. None of the prospects has recorded mineral production. Under the BLM mineral classification system, these areas are considered as having a moderate potential for the occurrence of these resources based on known occurrence and favorable geology (see Map 2).

   Several gem and mineral societies in San Diego and Imperial Valley have reported collecting schorl (a variety of hornblende), tourmaline, garnet, and epidote in the granitic batholith in the general area. The batholith has a number of intrusive dikes, sills, laccoliths, migmatites, quartz, granite, and pegmatites consisting of aplite that are favorable environments for mineral collection of gems and metallic mineralization. Based on similar geology, the southeastern portion and two areas in the north-central portion of the WSA are considered under the BLM classification system as having a moderate potential for the occurrence of gem minerals.

The Sawtooth Mountains A WSA lies within the Deer Park mining district.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: As of December 1987, there was no mining activity occurring in this WSA. There are no unpatented mining claims, mineral sales, leases or permits on record with the BLM as of January 1988.

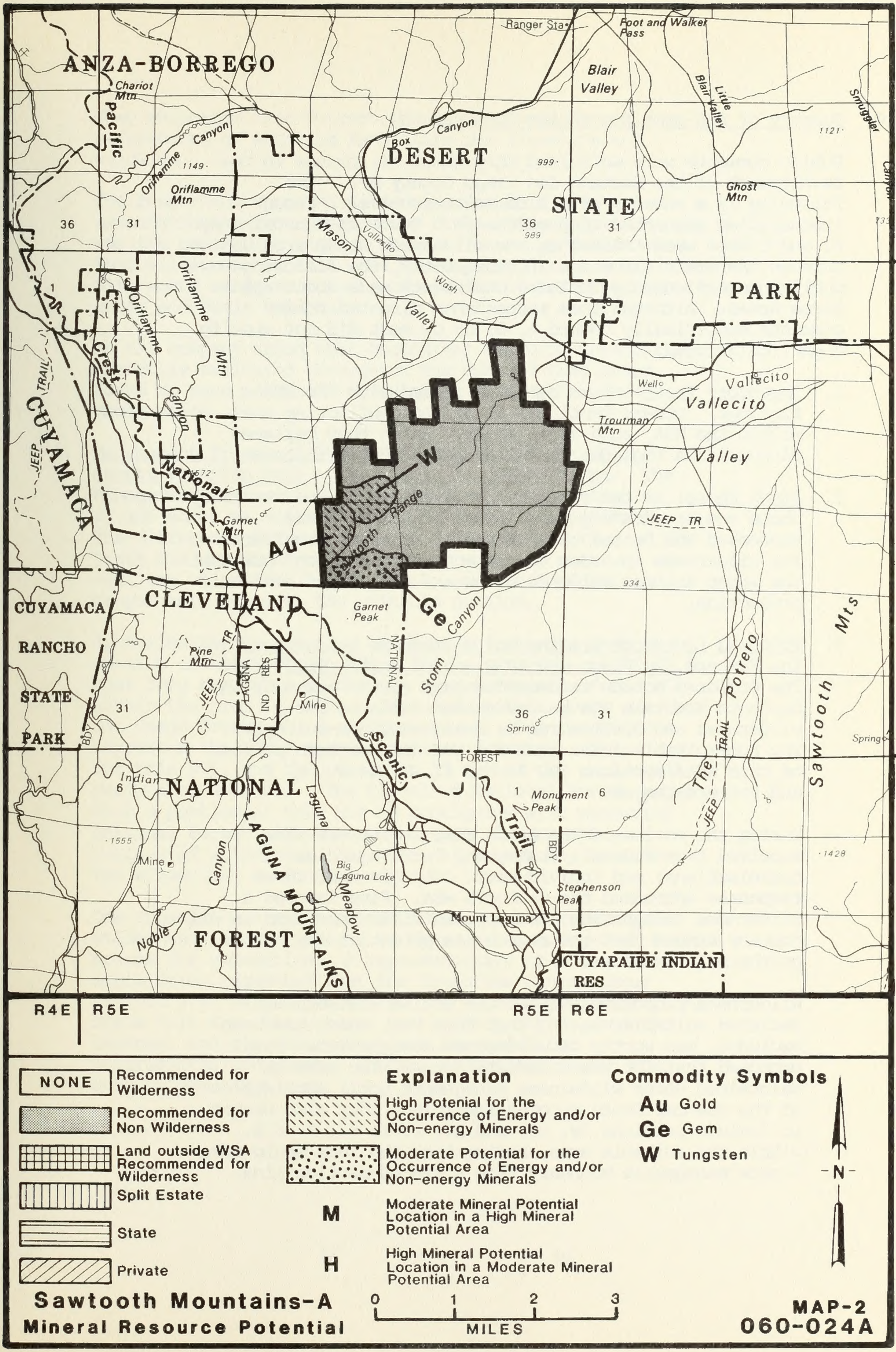
E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Issue Topic	Proposed Action (No Wilderness/No Action)	All Wilderness Alternative
Impact on Wilderness Values	Minor negative impacts to wilderness values will occur from the installation of one apiary site. One mining operation will have a moderate negative effect on naturalness. Mechanized fire suppression and pre-suppression activities will have a moderate, but short-term negative impact to naturalness, and a lesser impact to solitude. Grazing will have a minor negative impact to the bighorn sheep reintroduction program.	Net effect of this alternative would be the retention and long-term protection of the area's wilderness values. Grazing would have a minor negative impact to the bighorn sheep reintroduction program.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the EIS for the Section 202 Wilderness Recommendations, Eastern San Diego County Planning Unit. Therefore, no further discussion of this topic will occur in this document.



Sawtooth Mountains-A

Mineral Resource Potential

MAP-2

060-024A

G. Summary of WSA-Specific Public Comments

Public comments were solicited throughout all phases in the development of the Eastern San Diego County MFP. The following is a summary of all comments received. Known inaccuracies are noted in parentheses. Sawtooth Mountains A, B, and C WSAs were treated as one wilderness study area up through the draft EIS stage. Consequently, the following public comment summary includes statements made about all three areas. Although some respondents directed their comments specifically toward A, B, or C, most did not specify a particular area.

1. Inventory Phase: Some comments agreed with the BLM's findings. Others mentioned roads and conflicting uses within the WSA, such as an apiary, which they believed disqualified the area for wilderness consideration.

2. Study Phase: A few comments received during the inventory phase concerned study phase considerations. They expressed the belief that this area is being considered for wilderness in order to protect bighorn sheep, but that the sheep are not affected by humans and do not need this protection.

3. Proposed Livestock Grazing and Wilderness Management for the Eastern San Diego County Planning Unit - Draft EIS: The proposed action recommended that 25,515 acres of the Sawtooth Mountain WSA be designated suitable for wilderness and 5,629 acres be designated non-suitable. The non-suitable areas included the northwestern portion of this WSA; sections 19, 20 and 21, T. 14 S., R. 6 E.; and Potrero Canyon.

   During the review of the Draft EIS, 23 letters were received from Federal, State, and local agencies; organizations; and individuals. Only seven of these responses addressed the Sawtooth WSA. Five favored a wilderness designation, one opposed wilderness, and an oil company stated that the region has potential for geothermal resources.

   Wilderness proponents wanted the entire Sawtooth WSA declared suitable, saying that this WSA, which had been excluded, was worthy of wilderness designation. They proposed that for the immediate future, the area be maintained under wilderness management until acquisition of the Spencer Ranch becomes feasible. They also wanted to include sections 19, 20, and 21, T. 14 S., R. 6 E., within the suitable area, noting that the road would make a more manageable boundary than a fenced section line.

They requested that Potrero Canyon be closed except for maintenance of watering facilities for livestock and wildlife.

The respondent opposing wilderness for this area was an association of four-wheel drive clubs. Its major concern was the peninsular bighorn sheep. The respondent stated that wilderness in this area would be in direct conflict with sound management and manipulation of both the bighorn sheep and their habitat.

An oil company urged that geothermal resource potential be carefully evaluated throughout the WSA and that areas found to have potential be exempted from wilderness designation.

4. Management Framework Plan (MFP) for Eastern San Diego County Planning Unit - Wilderness Recommendations: The Management Framework Plan recommended a designation of 27,205 acres as suitable and 3,892 acres as unsuitable. The difference between this and the recommendation of the Draft EIS on wilderness management was that portions of sections 19 and 20, T.14S., R.6E., and most of Potrero Canyon were added to the suitable portion.

Approximately 54 out of a total of 60 comments gave an opinion of the Sawtooth WSA. Eleven were non-specific, in that they requested wilderness status for all of the WSAs within the planning unit. Included in this group was the San Diego County Board of Supervisors. Ten respondents supported the BLM's recommendation of partial wilderness for this WSA, and the remaining 33 wanted the entire WSA designated suitable. The Cleveland National Forest noted that a portion of this WSA is contiguous with potential National Forest wilderness, and that if Sawtooth is designated wilderness, the National Forest may consider the wilderness option for adjacent lands.

One organization and two individuals wanted no further wilderness in this region, as they wanted four-wheel drive access for recreation. A representative of a homeowners association requested that the Canebrake Canyon-Inner Pasture area be designated for low-intensity multiple use, since this area has a road, two landing strips, and two ranches, and also because access is needed for firefighting equipment. Another respondent wanted the Potrero road kept open.

Sawtooth Mountains B

CA-060-024B

SAWTOOTH MOUNTAINS B WILDERNESS STUDY AREA (WSA)

(CA-060-024B)

1. THE STUDY AREA --- 25,871 acres

The Sawtooth Mountains B WSA is located in east-central San Diego County, about 38 miles south of Borrego Springs and 95 miles east of San Diego. The study area contains 25,871 acres of public land under the jurisdiction of the BLM and 40 acres of private lands (see Map 1 and Table 1). This WSA borders two smaller BLM WSAs of less than 5,000 acres, Sawtooth Mountains A (CA-060-024A) and Sawtooth Mountains C (CA-060-024C), on the northwest and southeast, respectively.

Beginning at Storm Canyon Road, which separates this WSA from Sawtooth Mountains A, the north boundary runs eastward cross-country until it meets a primitive road that services Potrero Canyon. The boundary then cherrystems this road and a parallel route to the east, finally heading northeast to meet the boundary of public and private land on the east side of Vallecito Valley. The WSA boundary then follows the property line eastward to the edge of Anza-Borrego Desert State Park, turning southward to follow the state park boundary, then skirting a section of private property to meet a primitive way, which it follows to Canebrake Canyon. The Canebrake Canyon Road then forms the WSA boundary, separating it from Sawtooth Mountains C WSA. The entire Canebrake Canyon Road is cherrystemmed out of the WSA. The study area boundary then once again follows the state park boundary, until at its southernmost point, it meets other BLM lands which are part of the McCain Valley Resource Conservation Area. The boundary turns north and then west, skirting the Cuyapaipe Indian Reservation. The west WSA boundary adjoins the Cleveland National Forest, heading north and west until it meets the edge of Sawtooth Mountains A WSA, skirting private property in Storm Canyon to once again meet the Storm Canyon Road.

Elevations within the WSA range from 1,400 to 5,600 feet, with the area generally describable as alternating ridges and valleys. These ridges extend like fingers from the Laguna Mountains into the desert, and in doing so create the alluvial valleys known as Vallecito (including Potrero and Storm Canyons), Inner Pasture, and Canebrake Canyon. Ephemeral streams drain these valleys.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). The WSA is within BLM's Eastern San Diego County Planning Unit, for which a management framework plan (MFP) was completed in 1981. Four suitability recommendations were analyzed in the draft and final Environmental Impact Statements (EISs), on the Wilderness Recommendations for the Eastern San Diego County Planning Unit, completed in 1986: all wilderness, no wilderness, and two partial wilderness options, one recommending 86% of the WSA suitable for wilderness and the other recommending 89% suitable for wilderness.

The 89% partial wilderness recommendation as presented in the 1986 final EIS differs from that analyzed in the draft EIS issued in 1980 and the amendments that were considered in the 1982 amendment review of the California Desert and Eastern San Diego County Plans. Unlike the 1980 draft EIS and the 1982 plan amendments, all cherrystems in the Potrero, Canebrake, and Inner Pasture Canyon areas would be eliminated, and the lands made a part of the wilderness area.

2. RECOMMENDATION AND RATIONALE --- 22,875 acres recommended for wilderness
2,916 acres recommended for nonwilderness

Partial wilderness (89% suitable) is the recommendation for the Sawtooth Mountains B WSA. This recommendation is the 89% wilderness as described in the 1986 final EIS. The 2,916 acres in this WSA recommended for nonwilderness are released for uses other than wilderness. In addition to the Federal acreage recommended for wilderness, BLM recommends that 40 acres of private inholdings and 1,920 acres of adjacent private lands be acquired through exchange or purchase and designated as wilderness. The adjacent private lands are surrounded on three sides by the WSA, and since their wilderness values are equal to those within the study area, their acquisition and addition to the wilderness is logical. With acquisition of these parcels, a total of ~~24,875~~ acres are recommended for wilderness. Appendix 1 provides additional information on acquisition of these private lands. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The all wilderness recommendation is environmentally preferable because it would result in the least change to the existing natural environment over the long term. It is not the recommendation for this WSA, however, for the reasons described below.

Pending development of a wilderness management plan, the WSA will be managed in accordance with the 1981 Eastern San Diego County MFP, as amended. Since this is a broad-based, general plan, not all future management actions can be predicted with certainty. Projections have been made to allow analysis of the effects of the recommendation. Although the BLM is not necessarily committed to all of these actions, the following is an outline of reasonably feasible activities which could be expected to occur. Use of the Canebrake and Vallecito Grazing Allotments will continue. Grazing could increase from 738 to 1,100 animal unit months (AUMs), as present grazing use levels are below the identified potential carrying capacity. Bighorn sheep could be reintroduced into the area. Existing apiary sites will be phased out and no more permits issued. The WSA will be closed to recreational off-highway vehicle (OHV) use. The suitability recommendation will preclude any further vehicular use of approximately five miles of primitive routes of travel.

The rationale for the partial wilderness recommendation are that the lands proposed for wilderness (1) contain high-quality wilderness values, (2) encompass an ecological transition zone between the Colorado Desert and the Peninsular Mountain Ranges which is not represented in existing units of the

National Wilderness Preservation System, (3) encompass historical habitat for the peninsular bighorn sheep where reintroduction is feasible, and (4) the extent to which other resource values or uses would be foregone as a result of wilderness designation is slight, since grazing and apiary sites are the only land uses presently occurring, and grazing can continue.

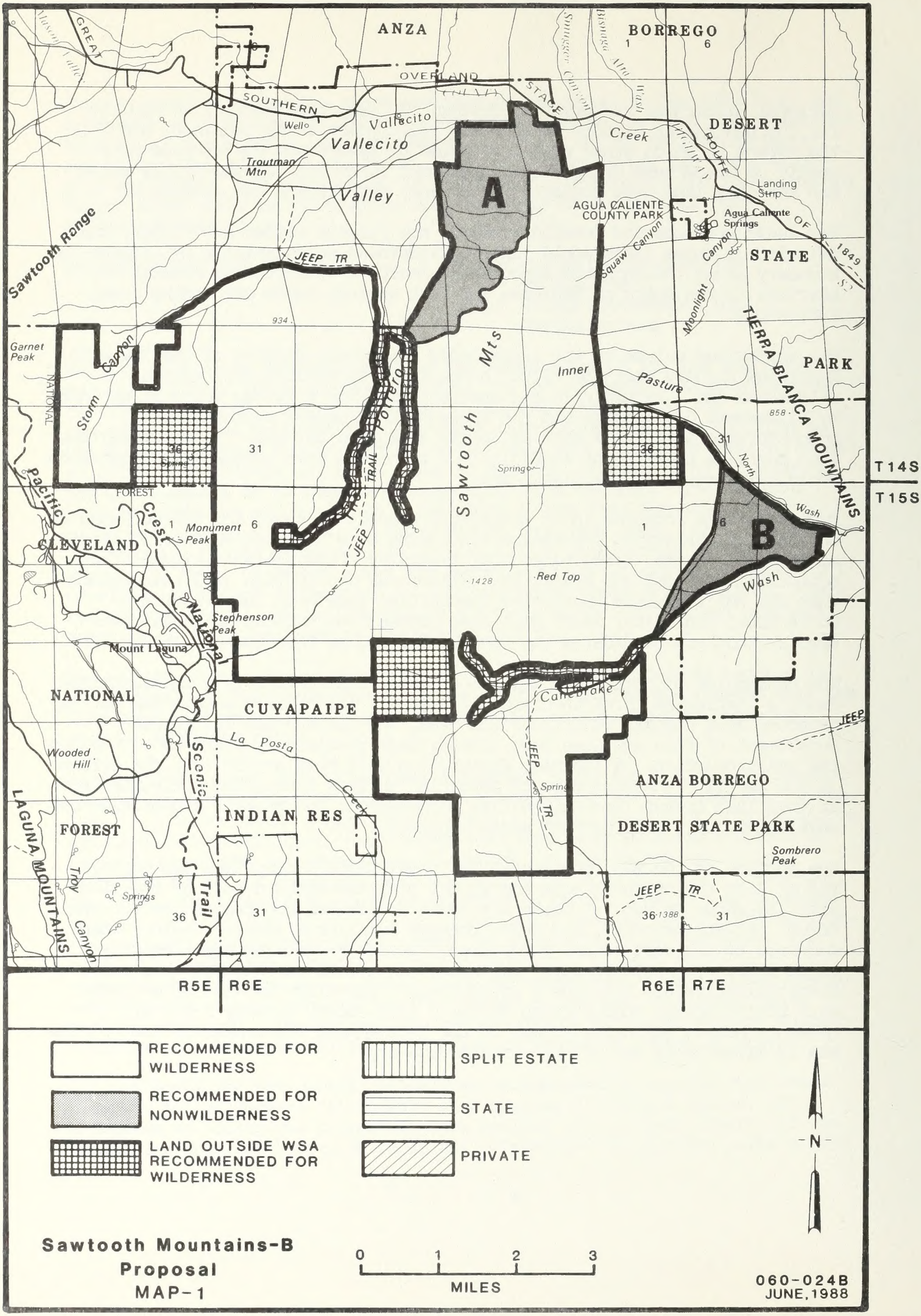
The lands proposed for nonwilderness do not possess wilderness values, and deletion of these lands would improve wilderness manageability by placing the boundary along recognizable topographic features that provide natural barriers to the entry of vehicles and that exclude lands containing human intrusions.

The wilderness values of the recommended wilderness portion of the Sawtooth Mountains B fully meet the criteria specified in Section 2(c) of the Wilderness Act. Naturalness and opportunities for solitude would be enhanced by wilderness designation and the subsequent permanent exclusion of nonconforming activities such as apiary sites and OHV use. In addition, the area contains a wealth of archeological resources that wilderness designation would help preserve from disturbance.

Because of its location in an ecological transition zone, the WSA contains an outstanding variety of vegetation, including many uncommon species of special management concern. This biological diversity makes the WSA valuable for scientific research and education. Wilderness designation will help assure that the WSA's diverse vegetative communities remain in their natural, undisturbed condition, which will also protect the habitat of individual species that are candidates for Federal listing as threatened or endangered.

The peninsular bighorn sheep which once inhabited the WSA is a candidate for Federal listing as threatened and endangered. The habitat within the WSA is proposed as a bighorn reintroduction area, and BLM and the California Department of Fish and Game have already made preliminary plans to accomplish the reintroduction. Wilderness designation will help assure that the effort is successful. The exclusion of potential surface disturbing activities such as motorized travel, mechanized fire suppression, and mineral exploration and development will help protect sheep habitat.

The portion of the WSA recommended for nonwilderness comprises two parcels, Parcel A on the northern edge and Parcel B on the eastern edge of the study area, as shown on Map 1. These are areas of limited topographic relief that border private property, and which possess inferior wilderness values when compared to the rest of the study area. Parcel B contains approximately eight miles of primitive ways that have been closed to vehicles, but which nevertheless reduce the area's naturalness. BLM plans to develop a bladed dirt public access road through Parcel A from County Highway S-2. At present, public vehicular access to the recommended wilderness portion of the WSA is effectively cut off by private property.



Sawtooth Mountains-B
Proposal
MAP-1

060-024B
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	25,791
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		40
Total		25,871
Within the Recommended Wilderness Boundary		Acres
BLM	(within WSA)	22,875
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		22,875
Inholdings[1]		
State		0
Private		40
Private Land Outside of the WSA boundary Recommended for Acquisition and Designation as Wilderness		1,920
Within the Area Not Recommended for Wilderness		Acres
BLM	(surface and subsurface)	2,916
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		2,916

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: Most of the recommended wilderness portion of the study area is in a natural condition. However, several cherrystemmed roads, a few primitive ways, approximately one and a half miles of livestock fences, and five livestock water developments with associated troughs, a windmill, a water tank, four spring boxes, and above-ground pipelines are present. These intrusions are substantially unnoticeable within the study area as a whole, due to the screening effect of vegetation and topographic relief. Soils and vegetation within the area are essentially undisturbed.

   The portions of the WSA recommended for nonwilderness contain more concentrated human intrusions. Sparse vegetation and relatively flat topography do little to screen these intrusions from view. Parcel A contains approximately two miles of livestock fence along its boundary with private land. Parcel B contains eight miles of primitive ways and approximately one-half mile of livestock fence. A private section within Parcel B shows evidence of past development, including an abandoned airstrip.

2. Solitude: The area recommended for wilderness offers ample opportunities for solitude because of its large size, limited access, and the screening effects of vegetation and topographic relief. The portions of the WSA recommended for nonwilderness provide a buffer zone between this area and developed private property.

   Opportunities for solitude are more limited on the recommended nonwilderness portions of the study area. Little vegetative or topographic screening is provided here, and the parcels are adjacent to private property. The intrusive sight of farming uses outside the WSA in the Vallecito Valley impairs opportunities for solitude in Parcel A.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: The recommended wilderness area's large size and rugged topography offer many opportunities for hiking, backpacking, and nature observation and study. The presence of Anza-Borrego Desert State Park Wilderness to the east enhances these opportunities. Photographic opportunities abound during the

spring wildflower blooms, and the diverse and often dense vegetation provide opportunities for hunting mule deer, cottontail and jack rabbits, and upland game birds.

The recommended nonwilderness portions of the WSA present fewer opportunities for primitive recreation, because they are relatively flat areas of sparse vegetation, with little to attract the primitive recreationist.

4. *Special Features*: The WSA is a potential site for the reintroduction of peninsular bighorn sheep to a portion of its former range, and a memorandum of agreement to do so has been signed by the BLM and the California Department of Fish and Game. The sheep is listed as rare by the State, and is under status review by the U.S. Fish and Wildlife Service (US F&WS) for possible listing as threatened or endangered.

   The San Diego horned lizard has been found in the WSA on granitic outcrops. It is under status review by US F&WS. The spotted bat, also under Federal status review, is suspected to occur in the WSA, but its presence has not been confirmed. The US F&WS considers the loggerhead shrike sensitive in Region 1. The willow flycatcher is also a US F&WS sensitive species and is a species of special concern to the California Department of Fish and Game (CDFG). The former occurs year-long in the WSA, while the latter is a summer resident. The prairie falcon, golden eagle, and Cooper's hawk, also species of special concern to CDFG, occur within the WSA.

   The area has remarkably diverse vegetation, a factor which also contributes to its scenic quality. For example, in 1983 over 80 species of flowering plants were observed in less than one square mile. More than 200 species of plants are believed to exist within the study area, and this diversity is of special interest to botanists and other scientists. The WSA encompasses an unusual transition zone of vegetation, changing from a dense chaparral community at the higher elevations along the Laguna Mountains, to low desert creosote bush-agave-ocotillo in the Colorado Desert at the lower elevations.

   There are many plant species of special concern known to exist within the WSA. The following five are all under status review by the US F&WS for possible listing as threatened or endangered: *Astragalus douglasii* var. *perstrictus*, *Diplacus aridus*, *Ferocactus acanthodes* var. *accanthodes*, *Lupinus excubitus* var. *medius*, and *Opuntia bigelovii* var. *hoffmanii*. In addition, the following six species are listed by the California Native Plant Society (CNPS) as rare in California, but more common elsewhere: *Ayenia compacta*, *Geraea viscida*, *Lyrocarpa coulteri* var. *palmeri*, *Mentzelia hirsutissima* var. *stenophylla*, *Mirabilis tenuiloba*, and *Penstemon clevelandii* spp. *connatus*. Finally, *Delphinium parishii* spp. *subglobosum* and *Proboscidea althaeifolia* are listed by CNPS as plants of limited distribution. Other sensitive plant species are predicted to occur in the WSA based on their known presence nearby, and include four species under status review by US F&WS, one State listed rare species, and six additional species included on one of the CNPS lists.

The cultural resources within the WSA are rich and varied. Over 100 archeological sites have been recorded, and additional undiscovered sites are highly likely. Known sites include temporary camps, seed grinding stations, pottery scatters, rock art, several suspected cremations, and a multitude of earthen ovens or roasting pits. This area was clearly important to aboriginal populations. The combination of mountain fed creeks and diverse desert plant community offered great opportunities for sustenance. Plant foods of importance include agave, desert apricot, mesquite, jojoba, yucca, and various cacti. The archeological properties within the WSA are eligible for inclusion in the National Register of Historic Places.

The Kumeyaay Indians occupied this area in historic times. They have expressed concern over burials elsewhere and by extrapolation, the reported cremations with the WSA would be sensitive. The presence of rock art is also noteworthy and has been linked to shamanistic rituals. These sites are also considered sensitive.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 25,791 acres of the California Chaparral/California Oakwoods ecosystem. The individual ecosystems within the Sawtooth Mountains B WSA are already represented in the NWPS. However, the WSA encompasses an ecological transition zone between the Colorado Desert and the peninsular mountain ranges which is not currently represented in any single area within the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas		Other BLM Studies	
	areas	acres	areas	acres
	NATIONWIDE			
California Chaparral/ California Oakwoods	4	105,301	6	13,935
	CALIFORNIA			
California Chaparral/ California Oakwoods	4	105,301	6	13,935

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of five major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas		Other BLM Studies	
	areas	acres	areas	acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814

3. Balancing the geographic distribution of wilderness areas: The Sawtooth Mountains B WSA is within 50 air miles of six BLM WSAs recommended for wilderness designation. The closest designated wilderness is adjacent to the WSA in Anza-Borrego Desert State Park. Less than 50 air miles away are five other wilderness areas: Agua Tibia, Santa Rosa, Pine Creek, and Hauser, administered by the U.S. Forest Service; and Cuyamaca Mountains State Wilderness Area.

C. Manageability

The entire WSA is manageable as wilderness. However, there is a difference in ease of manageability between the portion recommended for wilderness and the portion recommended for nonwilderness.

The area's remoteness, lack of vehicle access except on the cherrystemmed routes, rugged topography, and the compatible management of adjacent state park wilderness are all factors that contribute to the manageability of the recommended wilderness portion. Manageability would be further enhanced by acquisition of the identified private parcels, to assure the maintenance of existing high wilderness values on the parcels.

Wilderness values on the recommended nonwilderness portion of the WSA are lower and were so at the time of the wilderness inventory. The fact that Parcels A and B have relatively flat topography, easier vehicular access, and that the two parcels border developed private property, are all factors which contributed to the loss of naturalness and solitude which has already occurred. These same factors would continue to make it difficult to protect or enhance these values under wilderness designation.

Eliminating Parcel A from the wilderness area will generally pull the wilderness boundary back to the bottom of a steep ridge, which will make it readily identifiable in the field with a minimum of signing. Presently, the boundary between Parcel A and the adjacent private property is merely a legal description which is not denoted by any topographic or physical feature, except two miles of livestock fence.

Parcel A is also a logical point at which to develop public vehicular access to the proposed wilderness area. The new wilderness will be of limited value to the public if it remains inaccessible. Presently, access to the edge of the recommended wilderness from County Highway S-2 is blocked by private property protected by locked gates.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Sawtooth Mountains B WSA is located within the Vallecito Mountains Geology-Energy-Minerals (G-E-M) Resource Area (GRA), for which BLM prepared a GRA Report in 1980. The south portion of the WSA had known occurrences of manganese and was classified in the GRA Report as having a moderate potential for the occurrence of manganese, a strategic mineral. In the northwestern portion of the WSA, occurrences of copper, lead, silver, and zinc were also classified as having a moderate potential. The western section of the WSA was classified by the U.S. Geological Survey (USGS) in 1979 as prospectively valuable (PV) for geothermal resources; however, under the BLM mineral resource classification system was considered as having a low potential for occurrence in the WSA.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: In 1983 and 1984 the USGS and the U.S. Bureau of Mines (BOM) conducted field examinations of this WSA. In 1987 the results of the investigations were published as a joint report, USGS Bulletin 1711-B. Although mineral resources were identified by BLM in the 1980 GRA Report and the 1986 EIS for the Wilderness Recommendations-Eastern San Diego County Planning Unit, the USGS and BOM report indicated that mineral resources or mineral resource potential had not been identified in the WSA.

   USGS and BOM found no direct evidence of gold mineralization in the western portion of the WSA except a favorable geologic environment where quartz intruded pelitic schist. The 1963 California Division of Mines and Geology (CDMG) County Report 3 listed several prospects for gold in quartz and schist but no production was listed for the WSA.

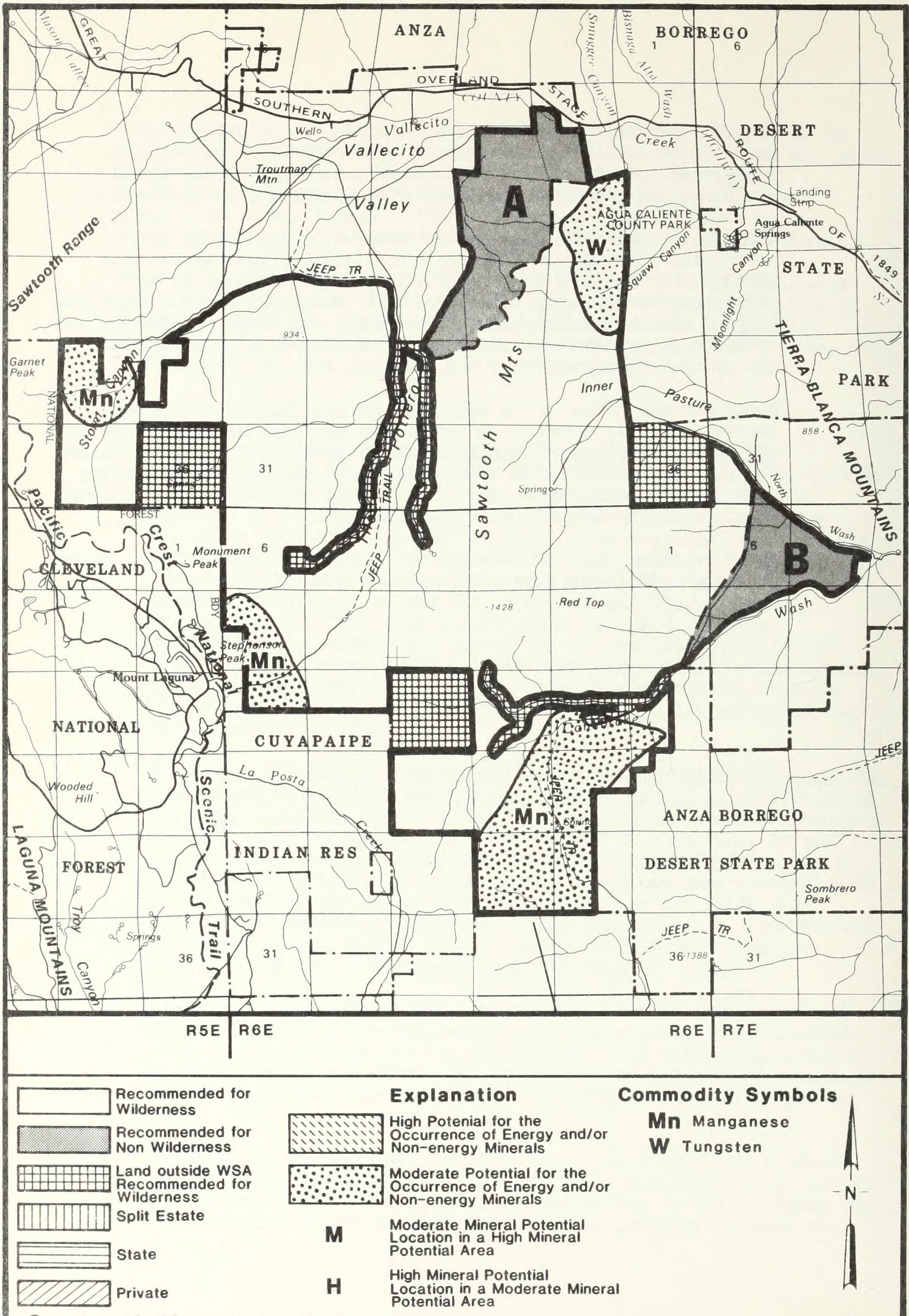
   The USGS and BOM reported localized anomalies for silver, barium, copper, bismuth, and lead. These data would support a low potential for the occurrence of base metal mineralization in the WSA under the BLM mineral resource classification system, revising downward the

BLM GRA moderate potential classification. Sand and gravel occurrences were noted as abundant by the USGS and BOM but not classified. However, lack of interest or a ready market would warrant a low potential for occurrence classification by the BLM.

USGS Survey Bulletin 1711-B noted tungsten prospects in the northeastern portion of the WSA, but no production figures were cited. The USGS bulletin showed, through geochemical surveys, widespread tungsten and tin anomalies. These geochemical anomalies, coupled with known favorable environment, would support the BLM GRA moderate potential classification for the occurrence of tungsten in the northeastern portion of the WSA.

Manganese was noted in the southwest portion of the WSA in CDMG County Report 3, although no production was reported. The USGS and BOM made no mention of this resource in their report. Nevertheless, the data of the 1963 CDMG County Report 3 supports BLM's moderate potential for occurrence classification in the western and southern portions of the WSA, which is shown on Map 2.

As of December 31, 1987, there were no mining claims, mineral sales or leases within the Sawtooth Mountains B WSA.



Sawtooth Mountains-B
Mineral Resource Potential

MAP-2
060-024B

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Issue Topic	Proposed Action (Partial Wilderness)	All Wilderness Alternative	No Wilderness/ No Action Alternative	Partial Wilderness Alternative
Impact on Wilderness Values	Wilderness designation of 22,835 acres will have a minor, positive impact on the area's wilderness values as a result of eliminating 20 miles of roads and six one-acre apiary sites and reintroducing peninsular bighorn sheep into the area. Development of a four-mile access road in the northern nonsuitable portion of the WSA and the resultant increase in motorized recreation use (from 50 to 500 visitor use days annually) will have a minor negative impact on the area's naturalness and solitude values on 300 to 500 acres.	Impacts would be the same as for the Proposed Action except that values of naturalness and solitude would be retained on an additional 1,707 acres in the northern Potrero Canyon Area.	There would be moderate adverse impacts on the area's wilderness values over approximately 15 to 20 percent of the WSA due to the noise and surface disturbance from increased OHV use (from 50 visitor use days annually to 1,000 visitor use days) and mineral exploration and development activities on over 85 acres of land.	There would be moderate adverse impacts on the area's wilderness values over approximately five to seven percent of the WSA due to the noise and surface disturbance from increased OHV use (from 50 visitor use days annually to 1,000 visitor use days) and mineral development of over 10 acres of land.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Issue Topic	Proposed Action (Partial Wilderness)	All Wilderness Alternative	No Wilderness/ No Action Alternative	Partial Wilderness Alternative
Impact on the Reintroduction of Bighorn Sheep	Reintroduction efforts will be slightly enhanced by closing 90 percent of the WSA to recreational OHV use. Increased grazing use levels (from 738 AUMs to 1,100 AUMs) will have a minor negative impact on these efforts.	Impacts would be the same as for the Proposed Action.	There would be a minor adverse impact on reintroduction efforts due to increased OHV use and mineral development activities. Motorized vehicles would, however, be used in sheep transplants and herd maintenance, thereby enhancing these efforts.	Impacts would be the same as for the No Wilderness/No Action Alternative.
Impact on Sensitive Plant Species	No significant impact. Sensitive species will be slightly enhanced by closure of over 90 percent of the WSA to recreational OHV use, restricting mechanized fire suppression equipment, and acquisition of private lands bordering the WSA.	No significant impact. Closure of the entire WSA to vehicular access including mechanized fire suppression equipment would slightly enhance sensitive plant species habitat.	Sensitive plant species will be moderately impacted in the Potrero Canyon and north and southeastern portions of the WSA as a result of increased OHV use from 50 visitor use days annually to 1,000 visitor use days) and mining exploration and development activities on over 85 acres.	Impacts would be the same as for the No Wilderness/No Action Alternative.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Issue Topic	Proposed Action (Partial Wilderness)	All Wilderness Alternative	No Wilderness/ No Action Alternative	Partial Wilderness Alternative
Impact on Archeological Resources and Native American Values	No significant impact. Overall, resources and values will be retained. Adverse impacts associated with route and trail development and increased livestock grazing will be minor.	No significant impact. Overall, resources and values would be retained. Adverse impacts associated with trail development and increased livestock grazing will be very minor.	Overall, resources and values will be moderately adversely impacted as a result of increased motorized and nonmotorized recreational use and mineral exploration and development activities on over 85 acres in the north and southwestern portions of the WSA.	There will be a minor, negative impact on archeological resources and Native American values as a result of increased motorized and nonmotorized recreation use and mineral development of 10 acres in the northwestern portion of the WSA.
Impact on Archeological Investigations	Scientific excavations will be restricted. This will result in a moderate adverse impact on the study and interpretation of regional cultural resources.	Impacts would be the same as for the Proposed Action.	No impact.	Scientific excavations would be restricted. This will have a moderate adverse impact on the study and interpretation of regional cultural resources.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

Issue Topic	Proposed Action (Partial Wilderness)	All Wilderness Alternative	No Wilderness/ No Action Alternative	Partial Wilderness Alternative
Impact on Motorized Hunting Access	Motorized hunting use of 50 visitor days annually will be foregone. However, impact will be minimal because of similar or superior opportunities on other public lands.	Impacts would be the same as for the Proposed Action.	Access will be greatly enhanced as a result of new route development, prescribed burns, and mineral exploration and development.	Access for motorized hunting will be moderately enhanced as a result of route development in the nonsuitable portion of the WSA and prescribed burns to be conducted in the western portion of the WSA.
Impact on Apiary Management	Commercial apiary use will be foregone; six one-acre apiaries will be eliminated. Impacts will be moderate because of the phased elimination of these sites and availability of other public lands for apiary management.	Impacts would be the same as for the Proposed Action.	No impact, current levels of apiary use would be retained.	Commercial apiary use will be foregone on three of the six one-acre sites. Impacts will be minor because of the phased elimination of these sites and availability of other public lands for apiary management

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the EIS for the Wilderness Recommendations, Eastern San Diego County Planning Unit. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

Public comments were solicited throughout all phases in the development of the Eastern San Diego County MFP. The following is a summary of all comments received. Known inaccuracies are noted in parentheses. Sawtooth Mountains A, B, and C WSAs were treated as one wilderness study area up through the draft EIS stage. Consequently, the following public comment summary includes statements made about all three areas. Although some respondents directed their comments specifically toward A, B, or C, most did not specify a particular area.

1. Inventory Phase: Some comments agreed with the BLM's findings. Others mentioned roads and conflicting uses within the WSA, such as an apiary, which they believed disqualified the area for wilderness consideration.

2. Study Phase: A few comments received during the inventory phase concerned study phase considerations. They expressed the belief that this area is being considered for wilderness in order to protect bighorn sheep, but that the sheep are not affected by humans and do not need this protection.

3. Proposed Livestock Grazing and Wilderness Management for the Eastern San Diego County Planning Unit - Draft EIS: The proposed action recommended that 25,515 acres of the Sawtooth Mountain WSA be designated suitable for wilderness and 5,629 acres be designated non-suitable. The non-suitable areas included the northwestern portion of the Sawtooth Mountains A WSA; sections 19, 20 and 21, T. 14 S., R. 6 E.; and Potrero Canyon.

   During the review of the Draft EIS, 23 letters were received from Federal, State, and local agencies; organizations; and individuals. Only seven of these responses addressed the Sawtooth WSA. Five favored a wilderness designation, one opposed wilderness, and an oil company stated that the region has potential for geothermal resources.

   Wilderness proponents wanted the entire Sawtooth WSA declared suitable, saying that Sawtooth A WSA, which had been excluded, was worthy of wilderness designation. They proposed that for the immediate future, the area be maintained under wilderness management until acquisition of the Spencer Ranch becomes feasible. They also wanted to include sections 19, 20, and 21, T. 14 S., R. 6 E., within the suitable area, noting that the road would make a more manageable boundary than a fenced section line.

   They requested that Potrero Canyon be closed except for maintenance of watering facilities for livestock and wildlife.

The respondent opposing wilderness for this area was an association of four-wheel drive clubs. Its major concern was the peninsular bighorn sheep. The respondent stated that wilderness in this area would be in direct conflict with sound management and manipulation of both the bighorn sheep and their habitat.

An oil company urged that geothermal resource potential be carefully evaluated throughout the WSA and that areas found to have potential be exempted from wilderness designation.

4. Management Framework Plan (MFP) for Eastern San Diego County Planning Unit - Wilderness Recommendations: The Management Framework Plan recommended a designation of 27,205 acres as suitable and 3,892 acres as unsuitable. The difference between this and the recommendation of the Draft EIS on wilderness management was that portions of sections 19 and 20, T.14S., R.6E., and most of Potrero Canyon were added to the suitable portion.

   Approximately 54 out of a total of 60 comments gave an opinion of the Sawtooth WSA. Eleven were non-specific, in that they requested wilderness status for all of the WSAs within the planning unit. Included in this group was the San Diego County Board of Supervisors. Ten respondents supported the BLM's recommendation of partial wilderness for this WSA, and the remaining 33 wanted the entire WSA designated suitable. The Cleveland National Forest noted that a portion of this WSA is contiguous with potential National Forest wilderness, and that if Sawtooth is designated wilderness, the National Forest may consider the wilderness option for adjacent lands.

   One organization and two individuals wanted no further wilderness in this region, as they wanted four-wheel drive access for recreation. A representative of a homeowners association requested that the Canebrake Canyon-Inner Pasture area be designated for low-intensity multiple use, since this area has a road, two landing strips, and two ranches, and also because access is needed for firefighting equipment. Another respondent wanted the Potrero road kept open.

5. 1982 Amendments to the Eastern San Diego County Management Framework Plan: Four amendments were proposed for the Sawtooth Mountains WSAs. One dealt specifically with the Sawtooth Mountains C WSA, and so is not included in this report. Comments on the other three amendment proposals are summarized below.

   Amendment 44. Delete some "cherrystemming" in the Canebrake area and add a small section of "cherrystemming" in the same general region: The rationale was that the roads to be deleted are not needed, as they are not maintained and do not serve any developments. The roads to be added correct a change in the original inventory in which a cherrystem was incorrectly mapped.

Twenty-two comments were received in response to the Draft EIS on this amendment. Nineteen favored the amendment and three were opposed. No specific reasons were given for either position. For the Final EIS, there were three comments, all of which supported the BLM's position on the amendment.

Amendment 45. Change recommendation of a portion of the Sawtooth Mountains B WSA, from suitable to non-suitable, and designate Class L (limited use): The triangular area is bordered on the northeast by North Wash, on the southeast by Canebrake Wash, and on the west by a non-maintained road. The rational was that this area is a bajada containing several man-made intrusions, including an old airstrip, a fence line, the Crawford Ranch, and some maintained roads. This area would be more properly managed as Class L (limited use) than as wilderness.

Twenty three comments were received in response to the Draft EIS. Fifteen respondents opposed the amendment and eight favored it. Most of those in opposition mentioned potential adverse impacts on bighorn sheep and cultural resources. One respondent requested deferral of the proposal for one year to allow completion of negotiations between the Anza-Borrego Desert State Park and the El Centro Resource Area (BLM). Another respondent said he could accept the amendment as long as the area would remain Class L and not be changed to Class M or Class I. The State of California Resources Agency opposed the amendment, stating it would create a four mile wide area of Class L land between two State wilderness areas. State management of the wilderness areas would be hampered due to increased exposure of their boundaries to non-wilderness uses. There could be adverse impacts on cultural resources, as well as on wildlife and habitat. The increased use of the area could also hamper the future reintroduction of bighorn sheep into the Sawtooth WSA.

One individual found the justification given for this change by the BLM totally unacceptable, claiming that the airstrip cited as an intrusion has long been out of use and shows sign of natural rehabilitation. It was also stated that the new boundary road on the west is much more likely to have OHV violations than the former boundary in the Canebrake Wash. Opening this road will negatively affect the bighorn sheep now inhabiting the area and will hurt any reintroduction efforts. For these and many other reasons, this individual recommended rejecting the amendment.

No specific justifications were made by those supporting the amendment.

Four comments were received in response to the Final EIS. All were against amendments. No new reasons were given.

Amendment 46. Move the boundary of the excluded area in the Potrero south and southeast and change the designation of the excluded area from suitable to non-suitable, Class L. Add "cherrystemming" in same area: The rationale for the proposal was that several apiary sites and grazing developments exist that need periodic maintenance. Access to these sites is necessary. The existing roads to these sites are apparently maintained, but were not identified in the inventory process. Boundary changes would make the area more manageable and could allow a motorized access route to be constructed to serve users such as hunters.

Twenty-two comments were received in response to the Draft EIS on this amendment. Ten favored and twelve opposed the amendments. One proponent stated he could accept the amendment if changing the boundaries will allow better management of the remaining WSA. He agreed that access should be provided to private lands to avoid conflicts with private landholders. An apiary operator supported the amendment, stating that he would maintain bees in the area while meeting the BLM's requirements. Most other proponents simply agreed with the BLM's rationale.

The California State Resources Agency opposed the amendment saying it would have adverse impacts on the wilderness qualities of the deleted area and would increase access to wilderness areas leading to increased uses of the portion of the Sawtooth WSA. It would provide access to several apiary sites and grazing developments for servicing, but range improvement would be exposed to additional damage by motorized vehicles.

Four comments were received in response to the Final EIS. All respondents opposed the amendment for the same reasons given above.

APPENDIX 1
ESTIMATED COSTS OF ACQUISITION OF NON-FEDERAL HOLDINGS WITHIN AREAS RECOMMENDED FOR DESIGNATION
SAWTOOTH MOUNTAINS WSA (CA-060-024B)

PARCEL No.	LEGAL DESCRIPTION TWNSHP	RNG	SEC	MERIDIAN	TOTAL ACREAGE	NUMBER OF OWNERS	TYPE OF OWNERSHIP BY ESTATE SURFACE ESTATE	SUBSURFACE ESTATE	PRESENTLY PROPOSED FOR ACQUISITION	PREFERRED METHOD OF ACQUISITION	ESTIMATED COST OF ACQUISITION LAND COSTS ($1000)	PROCESSING COSTS ($1000)
1	15S.	6E.	6	SBM	40	1	PRIVATE	PRIVATE	YES	PURCHASE	20.0	2.5
2	15S.	6E.	16	SBM	640	UNKNOWN	PRIVATE	PRIVATE	YES	PURCHASE	320.0	2.5
3	14S.	5E.	36	SBM	640	UNKNOWN	PRIVATE	PRIVATE	YES	PURCHASE	320.0	2.5
4	14S.	6E.	36	SBM	640	UNKNOWN	PRIVATE	PRIVATE	YES	PURCHASE	320.0	2.5

These figures were derived from Bureau Land Records and provide for more detail than GIS estimates and therefore may differ from acreage summaries in Table 1.

Sawtooth Mountains C

CA-060-024C

SAWTOOTH MOUNTAINS C WILDERNESS STUDY AREA (WSA)

(CA-060-024C)

1. THE STUDY AREA --- 2,454 acres

The Sawtooth Mountains C WSA is located in east-central San Diego County, about 45 miles south of Borrego Springs and 95 miles east of San Diego. This 2454-acre WSA consists entirely of public lands administered by the BLM (see Map 1 and Table 1).

The WSA is a narrow strip of land sandwiched between Canebrake Road and private property on the north, and Anza-Borrego Desert State Park on the east, south, and west. It is separated from the much larger Sawtooth Mountains B WSA (CA-060-024B) (which is recommended for wilderness designation) by Canebrake Road. The upper portion of the road separating the two WSAs is on public lands and has been closed to motor vehicles. The lower portion of the road is on private property, and provides access from County Highway S2 to residences in Canebrake Canyon. Closed by a locked gate, this private portion of the road is not available for use by the general public.

The WSA is a north-facing, rocky slope furrowed by dry washes that broaden into alluvial valleys. The area is approximately 80% mountainside and 20% alluvial valleys. A well-developed alluvial fan in the north-central portion of the WSA covers over 300 acres. Elevations range from 1,080 feet in the northeast corner to 3,400 feet in the southwest corner. Vegetation is almost exclusively desert scrub, although chaparral begins to appear at the higher elevations at the south end. A spring on private property in Canebrake Canyon provides that drainage on the WSA boundary with year-round flowing water.

The Master Title Plat shows a right-of-way (R-1285) for a pipeline within Lot 46, in section 3 of T. 15 S., R. 7 E., SBM. The right-of-way holder of record is the Canebrake County Water District.

The WSA was studied under Section 202 of the Federal Land Policy and Management Act (FLPMA). The rationale for considering Sawtooth Mountains C a wilderness study area was that Anza-Borrego Desert State Park was studying the wilderness suitability of its contiguous land. That portion of the state park has since been designated wilderness. The WSA is within BLM's Eastern San Diego County Planning Unit, for which a management framework plan (MFP) was completed in 1981. Plan amendments affecting the recommendation for this WSA were added in 1982. Two suitability recommendations were analyzed in the 1980 draft EIS on Livestock Grazing and Wilderness Management of the Eastern San Diego County Planning Unit, and the final EIS on the Wilderness Recommendations for the Eastern San Diego County Planning Unit Section 202 WSAs, completed in 1988: all wilderness and no wilderness.

2. RECOMMENDATION AND RATIONALE ---

0 acres recommended for wilderness
2,454 acres recommended for nonwilderness

No wilderness is the recommendation for the Sawtooth Mountains C WSA, as described in the Eastern San Diego County Planning Unit MFP, 1982 amendment 43. The entire acreage in this WSA is released for uses other than wilderness. This recommendation will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

All wilderness is the environmentally preferable alternative. This is because it will result in the least change from the existing natural environment over the long term. It is not the recommendation for this WSA, however, for the reasons described below.

The study area will continue to be managed in accordance with the Eastern San Diego County Planning Unit MFP. Since this is a broad-based, general plan, not all future management actions can be predicted with certainty. Projections have been made to allow analysis of the effects of the recommendation. Although the BLM is not necessarily committed to all of these actions, the following is an outline of reasonably feasible activities which could be expected to occur. Fire suppression and pre-suppression activities will be guided by a resource area fire management plan to be completed in approximately 1990. It is expected that the plan will allow the use of mechanized equipment, and that existing routes will be used as firebreaks, but will not be maintained. No new firebreaks will be constructed. Following completion of the plan, prescribed burning could occur at the rate of 500 acres every five to ten years, in 30-acre to 50-acre increments. It is expected that one small mine will be developed in the mid-1990s in the south half of Section 7. One-quarter mile of new road would be necessary to reach the mineralized zone, and total surface disturbance would be less than two acres. No routes of travel have been identified within the WSA.

The no wilderness recommendation is based on the following rationale: (1) management of the area as wilderness would be difficult because of the likelihood of additional intrusions on wilderness values from adjacent private parcels, (2) the wilderness values of the area are not considered outstanding, and (3) current management has proven effective in maintaining the area's existing resources.

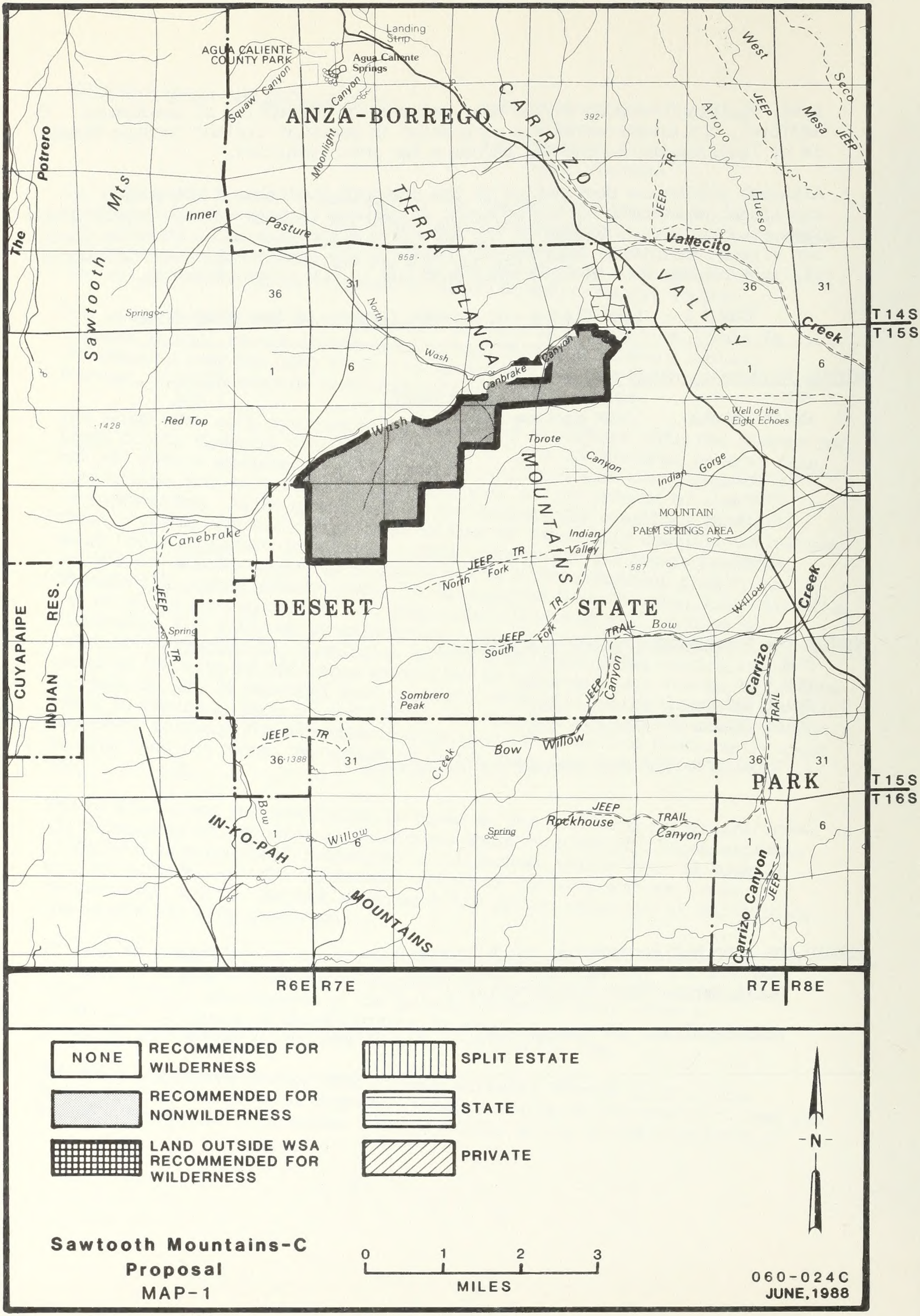
The WSA is essentially a slope overlooking private property, and its wilderness values are therefore impacted by sights and sounds originating there. Further development of the private property would cause a significant decrease in opportunities for solitude and the quality of the primitive recreation experience to be had within the WSA.

The WSA's wilderness values have already suffered adverse impacts from development of the private property, which contains an improved dirt road and numerous recreation residences. The proximity of the private residential area, visible from much of the WSA, reduces the perception of remoteness. In addition, the area's value for recreation is somewhat limited because there is no legal access to the WSA boundary for motor vehicles.

Although wilderness designation of the Sawtooth Mountains C WSA would compliment management of the adjacent wilderness of Anza-Borrego Desert State Park, the wilderness values of the extensive state park lands stand on their own without this WSA. Anza-Borrego Desert State Park's wilderness resources will not be impacted in any significant way by the proposed action.

TABLE 1 - Land Status and Acreage Summary of the Study Area

Within Wilderness Study Area		Acres
BLM	(surface and subsurface)	2,454
Split Estate	(BLM surface only)	0
Inholdings		
State		0
Private		0
Total		2,454
Within the Recommended Wilderness Boundary		**Acres**
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		0
Inholdings		
State		0
Private		0
Within the Area Not Recommended for Wilderness		**Acres**
BLM	(surface and subsurface)	2,454
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		2,454



Sawtooth Mountains-C Proposal
MAP-1

060-024C
JUNE, 1988

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The Sawtooth Mountains C WSA appears to have been affected primarily by the forces of nature. Although the north WSA boundary coincides with Canebrake Canyon, which contains an improved dirt road and private property with numerous recreation residences, there is almost no evidence of human activity in the WSA. On the south the WSA borders Anza-Borrego Desert State Park Wilderness.

2. Solitude: Although the area is small, opportunities for solitude exist because of extremely low visitation. However, the proximity of the private residential area, visible from much of the WSA, reduces the perception of remoteness. The best opportunities for solitude are found in the southwest portion of the area. This is the widest portion of the WSA, farthest from the developed private property in Canebrake Canyon, and containing the most topographic relief to screen outside sights and sounds.

   This WSA is periodically overflown by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and Unconfined Recreation: Opportunities are limited because there is no legal access to the WSA boundary for motor vehicles. Also, on its own, this area is too small to provide much opportunity for primitive recreation. However, when considered with the adjacent state park land to the south and BLM's Sawtooth Mountains B WSA across Canebrake Road to the north, the area offers opportunities for hiking, backpacking, and general nature study. Opportunities for upland game and mule deer hunting are limited, since hunting is prohibited in the state park.

4. Special Features: There are four plant species within the WSA listed by the California Native Plant Society as rare in California, but more common elsewhere: Ayenia compacta, Bursera microphylla, Cassia covesii, and Mirabilis tenuiloba. However, none of these species is under status review by the U.S. Fish and Wildlife Service (US F&WS).

   The San Diego coast horned lizard, under status review by US F&WS, occurs within the WSA on granitic outcrops. The spotted bat, also under status review by US F&WS, is suspected to occur here but its presence has not been confirmed. The WSA is historic habitat for the peninsular bighorn sheep, listed as rare by the State of California and currently under status review by US F&WS. The WSA is part of a larger area which BLM and the California Department of Fish and Game (CDFG) have targeted for the reintroduction of peninsular bighorn sheep, although no active management efforts are planned inside the study area. The US F&WS considers the loggerhead shrike sensitive in Region 1. The willow flycatcher is also a US F&WS sensitive species and a species of special concern to the CDFG. The former occurs year-long in the WSA, while the latter is a summer resident.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 2,454 acres of the California Chaparral/California Oakwoods ecosystem. Wilderness designation of the Sawtooth Mountains C WSA would not increase the ecological diversity of the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	NWPS Areas areas	NWPS Areas acres	Other BLM Studies areas	Other BLM Studies acres
NATIONWIDE				
California Chaparral/ California Oakwoods	4	105,301	6	37,272
CALIFORNIA				
California Chaparral/ California Oakwoods	4	105,301	6	37,272

2. Expanding the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers: The WSA is within a five-hour drive of five major population centers. Table 3 summarizes the number and acreage of wilderness areas and other BLM study areas within a five-hour drive of these population centers.

Table 3
Wilderness Opportunities for Residents
of Major Population Centers

Population Centers	NWPS areas areas	NWPS areas acres	Other BLM Studies areas	Other BLM Studies acres
California				
Anaheim-Santa Ana	25	2,823,534	153	5,703,616
Los Angeles-Long Beach	27	2,876,234	135	4,958,751
Oxnard-Ventura	23	2,195,198	85	2,703,260
Riverside-San Bernardino	22	2,031,054	205	7,658,649
San Diego	15	1,043,680	100	3,378,814

3. Balancing the geographic distribution of wilderness areas: The Sawtooth Mountains C WSA is within 50 air miles of seven BLM WSAs recommended for wilderness designation, including the adjacent Sawtooth Mountains B WSA. The closest designated wilderness is adjacent to the WSA in Anza-Borrego Desert State Park. Less than 50 air miles away are five other wilderness areas: Agua Tibia, Santa Rosa, Pine Creek, and Hauser, administered by the U.S. Forest Service; and Cuyamaca Mountains State Wilderness Area.

C. Manageability

The Sawtooth Mountains C WSA is manageable as wilderness. However, the future quality of opportunities for solitude and primitive or unconfined recreation would remain uncertain. The WSA is essentially a slope overlooking private property, and its wilderness values are therefore very vulnerable to sights and sounds originating there. Further development of the private property could cause a significant decrease in opportunities for solitude and the quality of the primitive recreation experience to be had within the WSA.

Military overflights in the WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of Information Known at the Time of the Preliminary Suitability Recommendation: The Sawtooth Mountains C WSA is located in the BLM Vallecito Mountains Geology-Energy-Mineral (G-E-M) Resource Area (GRA). BLM had not classified the WSA for mineral occurrence potential at the time of the preliminary wilderness recommendations. The WSA is within an area that has been designated as prospectively valuable for geothermal resources by the U.S. Geological Survey (USGS).

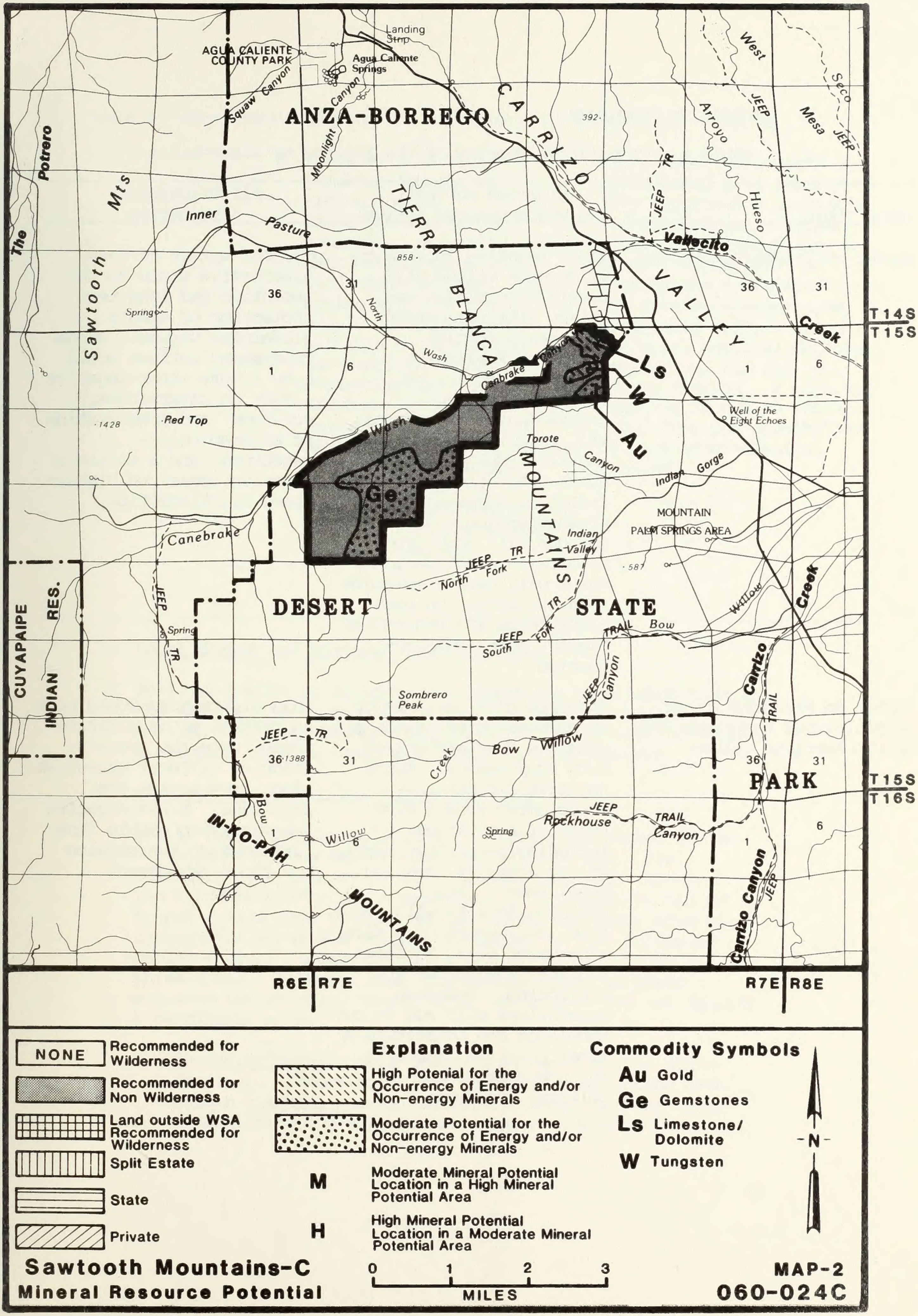
   The 1963 California Division of Mines and Geology (CDMG) County Report 3 lists mines and commodities, prospects, and mineral production from the late 1800s until 1963. The CDMG report shows that in 1940, $2,000 worth of scheelite (tungsten ore) was mined in the far eastern part of the WSA. This area is shown on Map 2 as having a high potential for the occurrence of tungsten minerals under the BLM classification system. Small amounts of scheelite were mined in the southwestern section in the 1950s but were abandoned because of the low grade encountered.

2. Summary of Significant New Mineral Resource Data Collected Since the Preliminary Suitability Recommendation Which Should be Considered in the Final Decision: The far eastern section of the WSA also had several prospects for low grade gold. Production was not given in the CDMG report. Two gold prospects are located in the southwestern section of the WSA but neither was developed due to the erratic deposit in the contact zone.

Dolomite and limestone were mined in the early 1950s immediately outside of the eastern portion of the WSA. The geologic structure mined extends into the eastern portion of the WSA, and is considered to have a high potential for the occurrence of dolomite and limestone resources under the BLM mineral classification system.

The WSA is a favorite region for gem and mineral collecting. Several gem and mineral societies in San Diego and Imperial Valley have reported collecting schorl (a variety of hornblende), tourmaline, garnet and epidote in the granitic batholith in the general area. The batholith has a number of intrusive dikes, sills, laccoliths, migmatites, quartz, granite, and pegmatites consisting of aplite that are favorable environments for gem minerals and metallic mineralization. Based on similar geology, the southwestern portion of the WSA is considered under the BLM classification system as having a moderate potential for the occurrence of gem minerals.

The Sawtooth Mountains C WSA is within the Deer Park mining district. As of December 1987 there were no mining claims, mineral sales or leases within this WSA.



Sawtooth Mountains-C
Mineral Resource Potential

MAP-2
060-024C

E. Impacts on Resources

Table 4 - Comparative Summary of the Impacts by Alternative

Issue Topic	Proposed Action (No Wilderness/No Action)	All Wilderness Alternative
Impact on Wilderness Values	Minor negative impacts to wilderness values will result from mining and apiary site relocation. The area's special features, Peninsular bighorn sheep (to be reintroduced) and archaeological resources, will experience minor negative impacts from the above activities, and also from fire suppression and presuppression. Greatest impacts will occur from range management actions, which will have a moderate negative effect on both naturalness and Peninsular bighorn sheep reintroduction.	The net effect of this alternative would be the retention and long-term protection of area's wilderness values. Range management actions would have a very minor negative effect on naturalness, solitude, and preservation of archaeological resources, and a moderate negative impact on bighorn sheep reintroduction.
Impact on Preservation of Archeological Resources and Native American Values	Moderate negative impacts to archaeological sites are possible from mechanized fire suppression. Minor negative impacts are anticipated from a wide range of activities including prescribed burns, apiary activity, grazing development. Minor positive impacts will occur from development of a fire management plan, National Register nomination and monitoring. Research excavations will add to our knowledge and constitute a minor positive impact to the preservation of cultural resources.	This alternative would have an overall minor positive impact upon the preservation of cultural resources since many action are precluded. Minor negative impacts are possible from limited fire suppression and range management activities.

Table 4 - Comparative Summary of the Impacts by Alternative (Cont'd)

	There will be minor positive impacts to archaeological investigations since activities permitted under this action allow for a wide range of uses. Any action will, of course, require preparation of suitable environmental documentation, including archaeological investigations. Moderate negative impacts will occur from mechanized fire suppression activities. Moderate positive impacts will result from availability of the area for pure archaeological research.	Minor negative impacts are anticipated from limited fire suppression activities and elimination of apiary sites and research excavations. Minor positive impacts are envisioned from the fire management plan prescribed burn, grazing projects, National Register nomination, and the monitoring program. A moderate negative impact is anticipated from the prohibition of pure archaeological research.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the EIS for the Section 202 Wilderness Recommendations, Eastern San Diego County Planning Unit. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA-Specific Public Comments

Public comments were solicited throughout all phases in the development of the Eastern San Diego County MFP. The following is a summary of all comments received. Known inaccuracies are noted in parentheses. Sawtooth Mountains A, B, and C WSAs were treated as one wilderness study area up through the draft EIS stage. Consequently, the following public comment summary includes statements made about all three areas. Although some respondents directed their comments specifically toward A, B, or C, most did not specify a particular area.

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   During the review of the Draft EIS, 23 letters were received from Federal, State, and local agencies; organizations; and individuals. Only seven of these responses addressed the Sawtooth WSA. Five favored a wilderness designation, one opposed wilderness, and an oil company stated that the region has potential for geothermal resources.

   Wilderness proponents wanted the entire Sawtooth WSA declared suitable, saying that the Sawtooth Mountains A WSA, which had been excluded, was worthy of wilderness designation. They proposed that for the immediate future, the area be maintained under wilderness management until acquisition of the Spencer Ranch becomes feasible. They also wanted to include sections 19, 20, and 21, T. 14 S., R. 6 E., within the suitable area, noting that the road would make a more manageable boundary than a fenced section line. They requested that Potrero Canyon be closed except for maintenance of watering facilities for livestock and wildlife.

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5. 1982 Amendments to the Eastern San Diego County Management Framework Plan: Four amendments were proposed for the Sawtooth Mountains WSAs, two of which had an effect on Sawtooth Mountains C.

   Amendment 43. Delete Sawtooth Mountains C WSA and recommend this area as non-suitable, Class L: This amendment was contingent upon approval of Amendment 45 (see below). The rationale was that "if Amendment 45 is accepted, then area C will overlook Class L non-suitable land and will be difficult to manage for a wilderness experience due to intrusions of sights and sounds of man."

   Twenty two individuals, organizations, or governmental agencies commented on the Draft EIS on this amendment. Fifteen respondents favored the proposal and eight opposed it. The State of California Resource Agency opposed it, saying that acceptance would cause management problems to the adjacent State wilderness area by isolating the boundaries and making them awkward to patrol. Management as Class L would have some adverse impacts on the wilderness qualities and could compromise surrounding wilderness areas.

One individual stated that the BLM's rationale was fallacious, and that even if Amendment 45 were accepted, this area, since it is contiguous with a declared wilderness area in Anza-Borrego State Park, could continue to be a potential wilderness area. The other rationale of rejecting this area because of the "sights and sounds" of humans is invalid, since this criteria is not recognized by Congress; the respondent noted further that the sights and sounds are very minor and practically unnoticeable.

Respondents favoring the amendment agreed with the rationale of the draft EIS and gave no additional reasons for rejecting this area as wilderness.

Four letters were received in response to the Final EIS on this amendment. All were opposed to rejecting this area as wilderness for the same reasons given above.

Amendment 45. Change recommendation of a portion of the Sawtooth Mountains B WSA, from suitable to non-suitable, and designate Class L (limited use): The triangular area is bordered on the northeast by North Wash, on the southeast by Canebrake Wash, and on the west by a non-maintained road. The rational was that this area is a bajada containing several man-made intrusions, including an old airstrip, a fence line, the Crawford Ranch, and some maintained roads. This area would be more properly managed as Class L (limited use) than as wilderness.

Twenty three comments were received in response to the Draft EIS. Fifteen respondents opposed the amendment and eight favored it. Most of those in opposition mentioned potential adverse impacts on bighorn sheep and cultural resources. One respondent requested deferral of the proposal for one year to allow completion of negotiations between the Anza-Borrego Desert State Park and the El Centro Resource Area (BLM). Another respondent said he could accept the amendment as long as the area would remain Class L and not be changed to Class M or Class I. The State of California Resources Agency opposed the amendment, stating it would create a four-mile wide area of Class L land between two State wilderness areas. State management of the wilderness areas would be hampered due to increased exposure of their boundaries to non-wilderness uses. There could be adverse impacts on cultural resources, as well as on wildlife and habitat. The increased use of the area could also hamper the future reintroduction of bighorn sheep into the Sawtooth WSA.

One individual found the justification given for this change by the BLM totally unacceptable, claiming that the airstrip cited as an intrusion has long been out of use and shows sign of natural rehabilitation. It was also stated that the new boundary road on the west is much more likely to have OHV violations than the former boundary in the Canebrake Wash. Opening this road will negatively affect the bighorn sheep now inhabiting the area and will hurt any reintroduction efforts. For these and many other reasons, this individual recommended rejecting the amendment.

No specific justifications were made by those supporting the amendment.

Four comments were received in response to the Final EIS. All were against amendments. No new reasons were given.

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